



FINAL EXAMINATIONS

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(2 models + model for the special needs students)

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Model Examinations of the School Book

Model

1

Answer the following questions :

1 Complete each of the following :

(1) $1.5 \text{ litre} + 0.5 \text{ dm}^3 + 500 \text{ cm}^3 = \dots\dots\dots$ litres.

(2) The volume of a cuboid is 64 cm^3 and the area of its base is 16 cm^2 , then its height = $\dots\dots\dots$ cm.

(3) If the real length of an insect is 0.3 mm . and its length in a picture is 4.5 cm . , then the drawing scale = $\dots\dots\dots$:

(4) The area of the triangle = $\frac{1}{2} \times \dots\dots\dots \times \dots\dots\dots$

(5) If $A : B = 2 : 3$, $B : C = 3 : 5$, then $A : C = \dots\dots\dots$

(6) The opposite table shows the marks of 40 students in one test , then the number of students who got less than 30 marks = $\dots\dots\dots$

Marks	10 –	20 –	30 – 40
Number of students	10	13	17

2 Choose the correct answer :

(1) The range of the set of values : 7 , 3 , 6 , 9 and 5 is $\dots\dots\dots$

(2 or 4 or 6 or 12)

(2) $\frac{3}{4} = \dots\dots\dots$ (in decimal form)

(0.2 or 0.5 or 0.25 or 0.75)

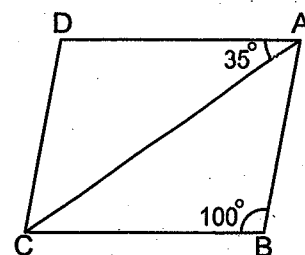
(3) An agricultural tractor ploughs 28 feddans in 4 hours , then the time which is needed to plough 42 feddans is $\dots\dots\dots$ hours.

(4 or 6 or 7 or 8)

(4) In the opposite figure :

ABCD is a parallelogram. , then

$m(\angle ACD) = \dots\dots\dots$



(35° or 45° or 100° or 180°)

(5) If $\frac{2}{5} = \frac{x}{15}$, then $x = \dots\dots\dots$

(2 or 5 or 6 or 15)

(6) The following data are descriptive data except

(favorite colour. or age. or birth place. or blood species.)

3 [a] A container has 12 litres of oil , it is wanted to put them in smaller bottles the capacity of each of them is 400 cm³ Calculate the number of bottles which are needed.

[b] If the buying price of electric sets is L.E. 72 000 and sold at 12 % profit. Calculate the selling price.

4 [a] The ratio among the measures of the angles of a triangle is 2 : 3 : 4 Find the measure of each angle in this triangle.

[b] A metallic cube of edge length 12 cm. It needs to be converted it into ingots in the shape of cuboid each of them of dimensions 3 cm. , 4 cm. and 6 cm. Calculate the number of ingots that are obtained.

5 [a] Two persons started a commercial business , the first paid L.E. 5 000 and the second paid L.E. 8 000 , at the end of the year , the net profit was L.E. 3 900 Calculate the share of each of them from the profit.

[b] The following table shows the marks of 100 students in one month in math test :

Marks	10 –	20 –	30 –	40 – 50	Total
Number of students	15	30	40	15	100

Draw the frequency curve of this distribution.

Model 2

Answer the following questions :

1 Choose the correct answer :

- (1) If one angle of a parallelogram is right , then it is called a
(rectangle. **or** square. **or** rhombus. **or** cube.)
- (2) $\frac{24}{5} = \dots\dots\dots$ ($4\frac{1}{5}$ **or** $3\frac{2}{5}$ **or** $4\frac{4}{5}$ **or** $2\frac{4}{5}$)
- (3) If the marks of 6 students in one exam are 29 , 33 , 57 , 40 , 36 and 49 , then
the range of these marks = (32 **or** 33 **or** 28 **or** 86)
- (4) If $\frac{4}{6} = \frac{12}{x}$, then $x + 2 = \dots\dots\dots$ (16 **or** 18 **or** 20 **or** 22)
- (5) $1\frac{3}{4} = \dots\dots\dots\%$ (25 **or** 50 **or** 75 **or** 175)
- (6) $\frac{513}{614} \dots\dots\dots \frac{432}{145}$ (**>** **or** **<** **or** **=** **or** **≥**)

2 Complete the following statements :

- (1) The data : the age , the tall , the weight and favorite food are quantitative data except
- (2) A wooden box in the form of a cube , its external volume is $1\,000\text{ cm}^3$ and its capacity is 729 cm^3 , then the volume of wood of the box
= cm^3
- (3) The following table shows the marks of 50 students in one month in math :

Marks	10 –	20 –	30 –	40 – 50	Total
Number of students	5	15	20	10	50

then the number of students whose marks are less than 40
is students.

- (4) If the height of the fence of the villa in the design is 5 cm. and its real height is 6 metres , then the drawing scale is :

(5) $\frac{3}{4} + 5\frac{1}{2} = 7 - \dots\dots\dots$

(6) A car consumes 20 litres of petrol to cover a distance 250 km.
 , then the rate of consumption of the car =

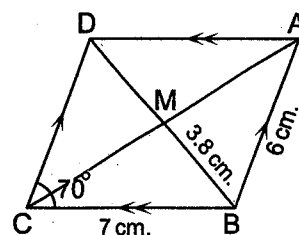
3 [a] Three persons started in business , the first paid 15 000 pounds , the second paid 25 000 pounds and the third paid 20 000 pounds , at the end of the year , the profit was 5 520 pounds.
 Calculate the share of each of them.

[b] 10 litres of water were poured in a vessel in the shape of a cuboid , its base is a square of side length 25 cm. Find the height of the water in the vessel.

4 [a] In one of our schools , there are 360 students , if the ratio between the number of boys and the number of girls is 1 : 2
 Find each of the number of boys and girls.

[b] In the opposite figure :

ABCD is a parallelogram in which AB = 6 cm.
 , BC = 7 cm. , BM = 3.8 cm. , $m(\angle C) = 70^\circ$
 Without using geometrical instruments.



Find : $m(\angle ADC)$, the perimeter of $\triangle BCD$

5 [a] Heba bought a mobile phone for 660 pounds with a discount 15 %
 Calculate the price of the mobile phone before the discount.

[b] The following table shows the number of hours which are spent by 40 pupils to study their lesson daily :

Number of hours	1 –	2 –	3 –	4 –	5 – 6	Total
Number of pupils	6	3	8	12	11	40

Represent these data by the frequency curve.

Model for the special needs students

Answer the following questions :

1 Complete the following statements :

(1) 5 000 grams : 8 kilograms = : (in the simplest form)

(2) $\frac{3}{10} = \dots\dots\dots \%$

(3) The volume of a cuboid = the area of base \times

(4) 3 litres = cm^3

2 Choose the correct answer :

(1) The range of the values 50 , 25 , 35 and 20 is

(10 or 20 or 30)

(2) If $\frac{2}{3} = \frac{10}{x}$, then $x = \dots\dots\dots$

(6 or 15 or 20)

(3) The diagonals are perpendicular in

(rectangle or square or parallelogram)

(4) If the real length is 6 m. and the drawing length is 6 cm. , then the drawing scale is

(1 : 10 or 1 : 1 000 or 1 : 100)

3 Choose from column (A) to the suitable one from column (B) :

A
(1) The cube has edges.
(2) If the drawing scale < 1 , this expresses
(3) The ratio between the side length of the square and its perimeter =
(4) All of angles of the rectangle are equal in measure and the measure of any of them =

B
minimization
12
90°
1 : 4

4 Put true (✓) or false (X) :

- (1) The numbers 1 , 2 , 6 and 12 are proportional. ()
- (2) If the percentage of boys is 35 % from the total of the number of pupils in a class , then the percentage of girls is 20 % ()
- (3) The favorite colour is a descriptive data. ()
- (4) The volume of a cube of edge length 3 cm. = 9 cm² ()

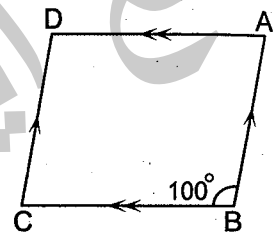
5 [a] Complete each of the following :

(1) If $A : B = 2 : 3$, $B : C = 3 : 5$, then $A : C = \dots\dots\dots : \dots\dots\dots$

(2) In the opposite figure :

ABCD is a parallelogram , then

$m(\angle D) = \dots\dots\dots^\circ$



[b] The following table shows the marks of 50 students in one month in maths :

Marks	10 –	20 –	30 –	40 – 50	Total
Number of students	6	10	20	14	50

Complete :

- (1) The number of students whose marks are less than 20 = students.
- (2) The number of students whose marks are 40 or more = students.

Some School's Examinations from Different Governorats

1 Cairo Governorate

Nasr City Edu. Administration
St. George's College



Answer the following questions :

1 Choose the correct answer :

- (1) If the ratio among the measurements of the angles of the triangle is 3 : 4 : 5 , then the measure of the greatest angle =
(90° or 75° or 60° or 55°)
- (2) 16 : 48 = : (1 : 2 or 1 : 4 or 1 : 5 or 1 : 3)
- (3) 5.7 litres = cm³ (5.7 or 570 or 5 700 or 57)
- (4) 3 , 4 , x and 12 are proportional quantities , then x =
(9 or 5 or 7 or 8)
- (5) The two diagonals are equal in length and perpendicular in
(parallelogram or square or rectangle or rhombus)
- (6) $\frac{2}{5}$ = % (20 or 30 or 40 or 50)
- (7) The range of the values 7 , 3 , 6 , 9 and 1 is
(8 or 1 or 7 or 0)
- (8) $\frac{1}{2}$ kg. : 700 gm. = : (2 : 7 or 7 : 8 or 5 : 7 or 7 : 9)
- (9) If the drawing length of an object is 2 cm. and the real length is 20 m. , then the drawing scale is =
(1 : 10 or 1 : 100 or 1 : 1 000 or 1 : 10 000)
- (10) If the volume of a cube = 0.125 cm³ , then its edge length = cm.
(25 or 0.25 or 0.5 or 5)
- (11) Ahmed drinks 21 glasses of milk weekly , then he drinks glasses of milk everyday.
(3 or 9 or 6 or 12)
- (12) From the quantitative data is
(favorite colour or name or age or blood type)
- (13) The ratio between the perimeter of an equilateral triangle and its side length =
(1 : 3 or 2 : 3 or 3 : 1 or 3 : 2)
- (14) $\frac{1}{4} : \frac{1}{3}$ =
(1 : 4 or 1 : 3 or 3 : 4 or 4 : 3)

2 Complete each of the following :

- (1) If the lower limit of the set = 10 and the upper limit = 30 ,
then the centre =
- (2) If $A : B = 1 : 2$ and $B : C = 3 : 5$, then $A : C = \dots : \dots$
- (3) If the drawing length < 1 , this express
- (4) 3 weeks : 24 days = : (in the simplest form)
- (5) $1 - (37 \% + 41 \%) = \dots$
- (6) The ratio between two numbers is $7 : 12$, if their sum is 76 , then the
greater number =
- (7) A cuboid is of dimensions 8 cm. , 6 cm. and 10 cm. , then its volume is
..... cm^3
- (8) If the perimeter of one face of a cube is 24 cm. , then its volume is cm^3

3 Answer the following questions :

- (1) Khaled bought a flat for L.E. 150 000 After selling it , he found that the
percentage of his loss was 5 % Calculate the selling price of the flat.

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- (2) A cube , the perimeter of its base is 40 cm. Calculate its volume.

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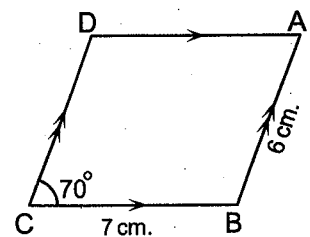
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- (3) In the opposite figure :

ABCD is a parallelogram ,
in which $m(\angle BCD) = 70^\circ$,
 $AB = 6 \text{ cm.}$ and $BC = 7 \text{ cm.}$

Find : [a] $m(\angle D)$

[b] The length of each of \overline{CD} and \overline{AD}

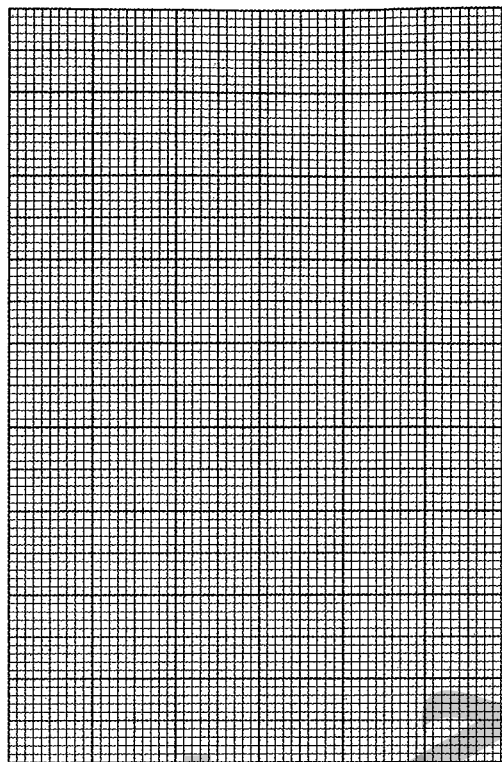


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- (4) The following table shows the number of hours , which are spent by 60 pupils :

Number of hours	10 –	20 –	30 –	40 –	50 –	Total
Number of pupils	9	13	18	12	8	60

Represent this distribution by a frequency curve.



2 Cairo Governorate

Maadi Educational Zone
Victory College Maadi



Answer the following questions :

1 Choose the correct answer :

- (1) If $A : B = 2 : 3$ and $B : C = 3 : 5$, then $A : C = \dots\dots\dots$
(3 : 2 or 5 : 2 or 4 : 5 or 2 : 5)
- (2) The following data are descriptive data except
(favorite colour or age or name or birth place)
- (3) 8 000 gm. : 5 kg. = (4 : 5 or 5 : 8 or 2 : 3 or 8 : 5)
- (4) If one angle of a parallelogram is right , then its called
(rectangle or rhombus or square or cube)
- (5) The cuboid has faces. (6 or 4 or 12 or 8)
- (6) $1.75 = \dots\dots\dots\%$ (75 or 0.175 or 175 or 17.5)

2 Complete :

- (1) If the drawing scale > 1 , this expresses
- (2) Mona deposit L.E. 9 000 in a bank with interest 11 % per year , the amount of sum after one year = L.E.

(3) If Hazem studies 21 hours weekly , then the rate = hours/day

(4) The ratio between two numbers =

3 Choose the correct answer :

(1) $5.6 \text{ dm}^3 = \dots\dots\dots$ litres. (5600 **or** 560 **or** 5.6 **or** 56)

(2) The ratio between the side length of an equilateral triangle and its perimeter is (1 : 3 **or** 1 : 4 **or** 1 : 1 **or** 3 : 1)

(3) The is a ratio with second term is 100
(proportion **or** percentage **or** rate **or** drawing scale)

(4) The ratio between a child's age to his father's age is 2 : 9 , if the child's age is 8 years , then his father's age is years. (63 **or** 13 **or** 36 **or** 18)

(5) If $\frac{2}{3} = \frac{12}{x}$, then $x + 2 = \dots\dots\dots$ (16 **or** 20 **or** 18 **or** 36)

(6) A primary school has 540 pupils , if the ratio between the number of boys and the number of girls is 4 : 5 , then the number of boys is
(300 **or** 240 **or** 352 **or** 675)

4 Complete each of the following :

(1) If the length of an insect in the picture is 10 cm. and its real length is 2 mm. , then the drawing scale = :

(2) In the parallelogram , the sum of the measures of any two consecutive angles is°

(3) The range of the 7 , 3 , 6 , 9 and 5 is

(4) The sum of lengths of all edges of a cube is 132 cm. , then its volume is cm^3

5 Answer the following :

(1) Three persons participated in a commerce , the first paid L.E. 1 500 , the second paid L.E. 2 000 and the third paid L.E. 2 500 , at the end of the year the loss is L.E. 1 200

Find the share of each of them from loss.

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- (2) 10 litres of water were poured in a vessel in the shape of a cuboid ,
its base is square of side length is 25 cm.
Find the height of the water in the vessel.

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- (3) The perimeter of a rectangle is 140 cm. and the ratio between its
dimensions is 3 : 4 Find its area.

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- (4) Which is greater in volume , a cuboid whose dimensions are 12 cm. ,
10 cm. and 8 cm. or a cube of edge length 10 cm. ?

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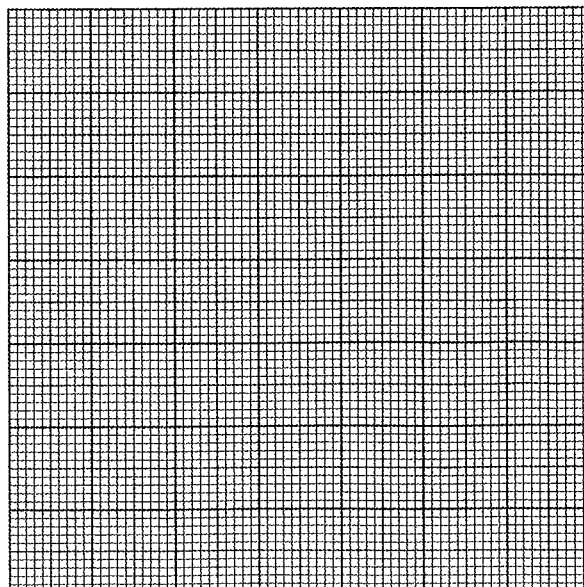
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- (5) The following table shows the number of hours which spent by 40 pupils to
study their lessons daily :

Number of hours	1 –	2 –	3 –	4 –	5 – 6	Total
Number of pupils	6	3	8	12	11	40

Represent these data using the frequency curve.



3 Giza Governorate

Omrania Educational Zone
El-Shahid (M.M.A) Exp. Lang. Sch.



Answer the following questions :

1 Choose the correct answer :

- (1) The volume of a cube equals 125 cm^3 , then the area of its base =
(5 cm^2 or 25 cm^2 or 125 cm^2 or 100 cm^2)
- (2) $\frac{2}{5} = \dots\dots\dots \%$ (20 or 30 or 40 or 50)
- (3) If $a : b = 3 : 5$ and $b : c = 5 : 7$, then $a : c = \dots\dots\dots$
(2 : 3 or 3 : 4 or 3 : 7 or 8 : 7)
- (4) $1 - 25 \% = \dots\dots\dots$ ($\frac{3}{4}$ or $\frac{1}{4}$ or $\frac{1}{8}$ or $\frac{3}{8}$)
- (5) If the numbers 3 , 5 , x and 20 are proportional , then $x + 3 = \dots\dots\dots$
(6 or 12 or 15 or 21)
- (6) If the drawing length is 6 cm. , and the real length is 6 metres , then the drawing scale = (1 : 10 or 1 : 100 or 1 : 1000 or 1 : 1)

2 Choose the correct answer :

- (1) $\frac{3}{4}$ litre = mL. (0.75 or 7.5 or 750 or 75)
- (2) The two diagonals are perpendicular in
(rectangle or rhombus or triangle or parallelogram)
- (3) The range of the values 7 , 3 , 6 , 9 and 1 is
(8 or 1 or 7 or 0)
- (4) The ratio between Aya's age and Eman's age is 1 : 6 , if Aya's age is 6 years old , then Eman's age is years old. (32 or 36 or 39 or 42)
- (5) If 45% of $x = 90$, then $x = \dots\dots\dots$ (20 or 100 or 200 or 300)
- (6) The ratio between 15 hours and one day in the simplest form =
(1 : 15 or 15 : 1 or 8 : 5 or 5 : 8)

3 Complete :

- (1) The number of axes of symmetry of a parallelogram is
- (2) The two diagonals are equal in length and perpendicular in
- (3) The difference between the maximum value and the minimum value is called
- (4) $12 : 18 : 36 = \dots\dots\dots : \dots\dots\dots : \dots\dots\dots$ (in the simplest form).

(5) A rate is

(6) 30 months : 3 years = : (in the simplest form).

(7) If 2 , x , 8 and 20 are proportional , then x =

(8) The drawing scale =

4 Answer the following :

(1) Find the cost price of goods sold for 21 275 pounds with profit percentage 15 %

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(2) A photo was taken for an insect by enlargement ratio 100 : 1 , if the real length is 0.8 cm. Find the length in the picture.

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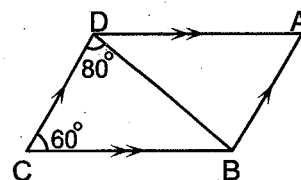
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(3) In the opposite figure :

ABCD is a parallelogram.

Find : [a] m (\angle ADB)

[b] m (\angle A)



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(4) Which is greater in volume , a cube of edge length 5 cm. or a cuboid of dimensions 3 cm. , 5 cm. and 7 cm. ?

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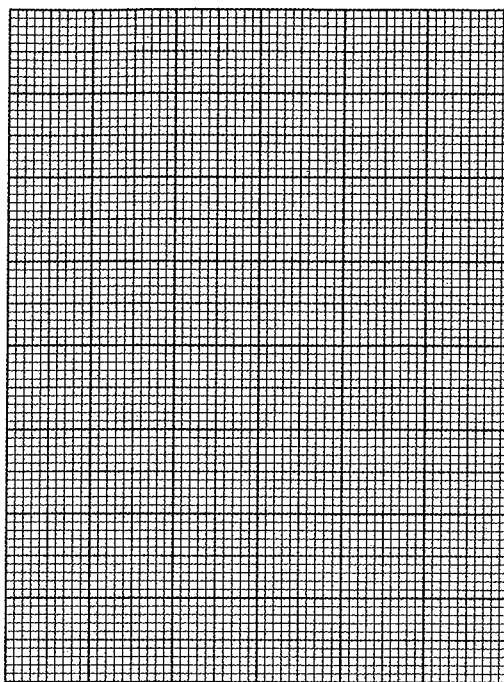
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(5) The following table shows the marks of 100 students in a maths test :

Marks	10 –	20 –	30 –	40 – 50	Total
Number of students	15	30	40	15	100

Draw the frequency curve of this distribution.



4 Alexandria Governorate

West Educational Zone
Maths Supervision



Answer the following questions :

1 Choose the correct answer :

(1) $\frac{1}{2}$ kg. 700 gm. ($<$ or $>$ or $=$ or \geq)

(2) $\frac{3}{4} : \frac{5}{6} = 9 : \dots\dots\dots$ (6 or 10 or 11 or 12)

(3) $\frac{7}{20} = \dots\dots\dots$ (7 % or 20 % or 35 % or 42 %)

(4) The parallelogram is a quadrilateral in which the sum of the measures of any two consecutive angles equals
(90° or 100° or 120° or 180°)

(5) $4 \text{ m}^3 = \dots\dots\dots \text{ dm}^3$ (40 or 400 or 4 000 or 40 000)

(6) If the numbers 4 , x , 12 , 18 are proportional , then $x = \dots\dots\dots$
(6 or 8 or 10 or 12)

(7) 8 hours : 3 days = 1 : (3 or 6 or 9 or 12)

(8) If $\frac{5}{8} = \frac{15}{x}$, then $x = \dots\dots\dots$ (8 or 16 or 24 or 32)

(9) If the distance between two cities on a map is 3 cm. , and the real distance between them is 9 km. , then the drawing scale of the map = 1 :
(3 or 3 000 or 30 000 or 300 000)

(10) If the number of boys in a class is 35 % from the total number of pupils , then the percentage of girls is (35 % or 65 % or 50 % or 55 %)

(11) The cuboid has six faces each of them is

(a rectangle **or** a square **or** a rhombus **or** a cube)

(12) If the marks of 6 students in one exam is 29 , 33 , 57 , 40 , 36 , 49 , then

the range of these marks = (32 **or** 33 **or** 28 **or** 86)

2 Complete each of the following :

(1) The volume of a cube of edge length 4 cm. = cm^3

(2) As comparing between two similar quantities or numbers and of the same unit , then the resultant fraction is called

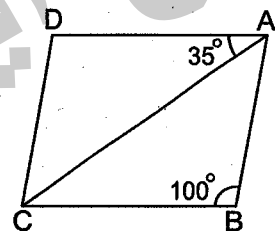
(3) The ratio between the circumference of the circle and its diameter length = :

(4) If the real length of an insect is 0.3 mm. and its length in a picture is 4.5 cm. , then the drawing scale = :

(5) In the opposite figure :

ABCD is a parallelogram

, then $m(\angle ACD) = \dots\dots\dots^\circ$



(6) If $A : B = 2 : 3$, $B : C = 3 : 5$, then $A : C = \dots\dots\dots : \dots\dots\dots$

(7) $\frac{\text{The drawing length}}{\text{The real length}} = \dots\dots\dots$

(8) The maximum mark – The minimum mark =

3 Answer the following :

(1) If the ratio between the weight of Hani and the weight of Ahmed is 5 : 6 , if the weight of Ahmed is 60 kilograms.

Calculate the weight of Hani.

.....

(2) If Hazem studies 21 hours weekly , then find the rate of his studying daily.

.....

(3) A cuboid of volume is $2\,128\text{ cm}^3$, its height is 14 cm. Find the area of its base.

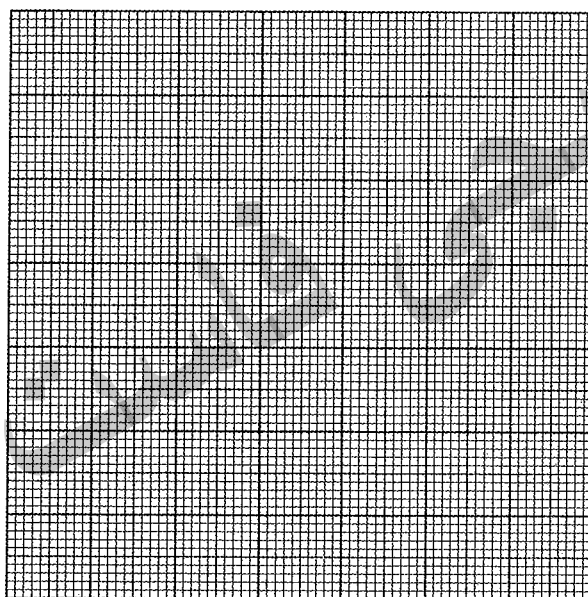
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- (4) A swimming pool in the shape of a cuboid , whose internal dimensions are 40 m. , 30 m. and 1.8 m. Find its capacity in litres.
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- (5) The following table shows the number of hours which spent by 40 pupils to study their lessons daily :

Number of hours	1 –	2 –	3 –	4 –	5 – 6	Total
Number of pupils	6	3	8	12	11	40

Represent these data using the frequency curve.



5 El-Kalyoubia Governorate

Banha Educational Zone
Maths Supervision



Answer the following questions :

- 1 Choose the correct answer :

(1) If $A : B = 2 : 3$, $B : C = 3 : 5$, then $A : C = \dots\dots\dots$

(3 : 5 or 2 : 5 or 5 : 3 or 5 : 2)

(2) If $\frac{4}{6} = \frac{12}{x}$, then $x + 2 = \dots\dots\dots$

(16 or 18 or 20 or 22)

(3) $\frac{3}{4} = \dots\dots\dots$ (in a decimal form)

(0.2 or 0.25 or 0.5 or 0.75)

(4) A car consumes 20 litres of petrol to cover a distance 250 km. , then the rate of consumption of the car is

(0.08 L./km. or 0.8 L./km. or 8 L./km. or 80 L./km.)

- (5) If the real length of an insect is 0.3 mm. and its length in a picture 4.5 cm. ,
then the drawing scale =

(1 : 15 or 1 : 150 or 150 : 1 or 15 : 1)

- (6) $\frac{3}{10} = \dots\dots\dots$ (300 % or 40 % or 30 % or 0.3 %)

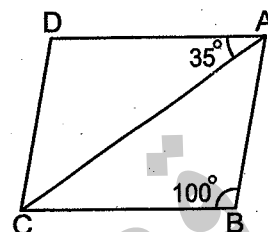
- (7) If the volume of a cuboid is 64 cm^3 and the area of its base 16 cm^2 , then its
height = (4 m. or 0.4 cm. or 4 dm. or 4 cm.)

- (8) In the opposite figure :

ABCD is parallelogram

, then $m(\angle ACD) = \dots\dots\dots$

(35° or 55° or 45° or 60°)



- (9) A cube , the sum of lengths of all edges is 132 cm.
 , then its volume =

($1\,771 \text{ cm}^3$ or $1\,331 \text{ cm}^3$ or $1\,444 \text{ cm}^3$ or $299\,968 \text{ cm}^3$)

- (10) In your class , if the percentage of boys is 35 % from the total number of
pupils , then the percentage of the girls in this class =
(65 % or 55 % or 75 % or 35 %)

- (11) The following data are descriptive data except

(favorite color or age or birth place or blood species)

- (12) If the numbers 9 , 21 , 3 , x are proportional , then $x = \dots\dots\dots$

(9 or 8 or 7 or 6)

2 Complete the following :

- (1) ABC is an equilateral triangle where $AB = 5 \text{ cm}$. , then the ratio between AB
and the perimeter of triangle ABC = :

- (2) The range of the set of values 50 , 25 , 35 , 20 is

- (3) An agricultural tractor ploughs 28 feddans in 4 hours , the time which need
to plough 42 feddans is hours.

- (4) The ratio between child's age and his father is 1 : 10 and the age of child is
6 years , then the father's age = years.

- (5) Hasnaa drew a picture for Omar with drawing scale 1 : 40 , if the real height
of Omar is 160 cm. , then the height of Omar in the picture = cm.

- (6) If one angle in a parallelogram is right , then it is called

- (7) $2.65 \text{ litres} = \dots\dots\dots \text{ dm}^3 = \dots\dots\dots \text{ cm}^3$

- (8) 16 kirats : 1 feddan = : (in the simplest form)

3 Answer the following :

- (1) Two persons started a commercial business , the first paid L.E. 5 000 and the second paid L.E. 8 000 At the end of the year , the profit was L.E. 3 900 Calculate the share of each of them from the profit.

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- (2) A building worker used 1 500 bricks to build a wall , calculate the volume of the wall in m^3 if the brick is in the shape of a cuboid of dimension 25 cm. , 12 cm. , 6 cm.

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- (3) An auto fair owner bought a car for L.E. 45 000 , then he spent L.E. 5 000 for repairing it , then he sold it for L.E. 55 000 Calculate :

[a] The profit after selling.

[b] The percentage of profit.

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- (4) 10 litres of water were poured in a vessel in the shape of a cuboid its base is a square of side length is 25 cm. Find the height of water in the vessel.

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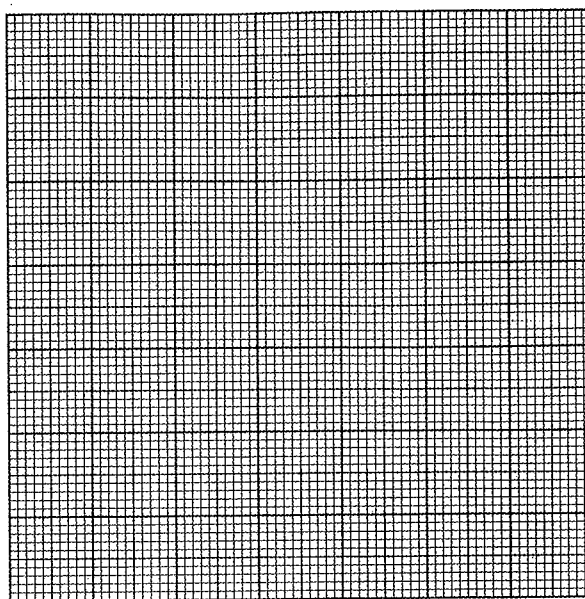
- (5) The following table shows the number of hours which spent by 40 pupils to study their lessons :

Number of hours	1 –	2 –	3 –	4 –	5 – 6	Total
Number of pupils	6	X	8	12	11	40

[a] Find the value of X

.....

[b] Represent these data using the frequency curve.



6 El-Sharkia Governorate

Belbeis Educational Administration
Al-Rosala Language Schools

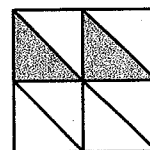


Answer the following questions :

1 Choose the correct answer :

(1) The fraction that represents the shaded part =

($\frac{1}{4}$ or $\frac{3}{4}$ or $\frac{2}{6}$ or $\frac{4}{7}$)



(2) $0.23 \text{ m}^3 = \dots\dots\dots \text{ L}$

(0.23 or 230 or 2.3 or 0.023)

(3) If $\frac{4}{6} = \frac{8}{x}$, then $x + 2 = \dots\dots\dots$

(15 or 14 or 16 or 12)

(4) The ratio between 15 hours , one day =

(1 : 15 or 15 : 1 or 8 : 5 or 5 : 8)

(5) If the range of some values is 40 and the number of sets is 10 , then the length of set =

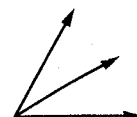
(5 or 7 or 6 or 4)

(6) All of the following data are quantitative except

(tallness or age or name or phone number)

(7) The number of angles in the following shape =

(1 or 2 or 3 or 4)



(8) The range of the values 29 , 33 , 57 , 40 , 36 is

(27 or 28 or 29 or 24)

(9) If 10 A , 2 , 2 A , B are proportional , then B =

(0.2 or 0.4 or 0.5 or 0.3)

(10) If x , 16 , 6 , 8 are proportional , then x =

(1 or 6 or 8 or 12)

(11) 6.5 L. = dm^3

(56 or 6.5 or 5 600 or 56 000)

(12) If a car covered 180 km. in three hours , then the velocity of this car
= km./hr.

(80 or 60 or 50 or 20)

2 Complete the following :

(13) $\frac{5}{4} : 2 = \dots : \dots$ (in the simplest form)

(14) If the lower limit of the set = 10 and the upper limit = 30 , then its centre =

(15) The ratio between the width and the length of a rectangle is 3 : 4 , then
length : perimeter =

(16) An amount of money is divided between two persons in the ratio 5 : 6 , then
what the first took = the total.

(17) $1 - (24 \% + 35 \%) = \dots \%$

(18) If the drawing scale < 1 , its represents

(19) Discover the pattern and write the description of     is

(20) The range of values (6 , 2 , 7 , x) is 9 , then x =

3 Answer the following questions :

(21) In a school , if the number of students is 560 students , if the number of girls $\frac{3}{5}$ of boys , find the number of each of boys and girls.

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(22) Ahmed drew a picture of his brother Osama by drawing scale 1 : 40 , if the real length is 160 cm. Find the drawing length.

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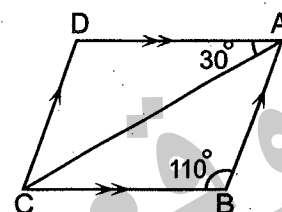
- (23) A cube of cheese , its edge length is 15 cm. , it is wanted to be divided it into small cubes , the edge length of each is 3 cm. for presenting them through meals. Calculate the number of the resulting small cubes.

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- (24) The opposite figure shows a parallelogram in which $m(\angle B) = 110^\circ$ and $m(\angle DAC) = 30^\circ$
Find : $m(\angle D)$, $m(\angle BAC)$ and $m(\angle ACD)$



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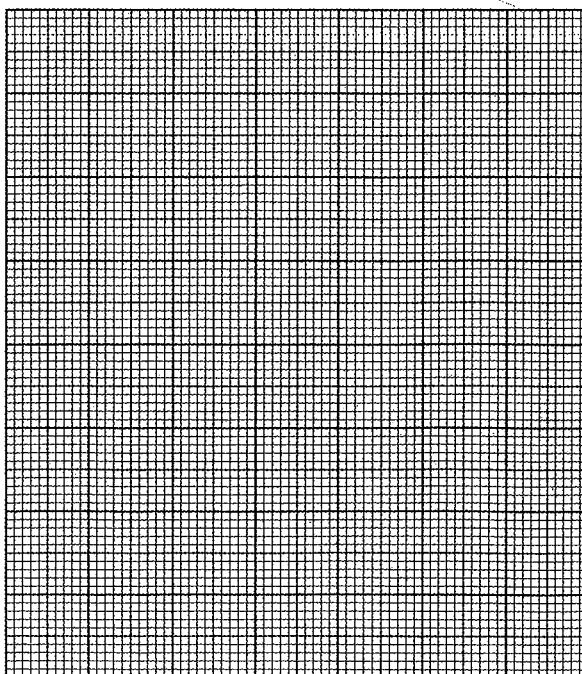
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- (25) The following table shows a sample of patients who suffer from a certain disease in a hospital due to the hours which were spent till they became healthy :

Number of hours	1 –	2 –	3 –	4 –	5 –	6 –	Total
Number of patients	7	11	15	6	4	2	45

Represent these data by a frequency curve.



7

El-Monofia Governorate

Shiben El-Kom Educational Directorate
Maths Department



Answer the following questions :

1 Choose the correct answer :

(1) The following data are descriptive data except

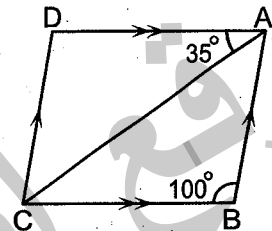
(favorite color **or** age **or** birth place **or** blood species)

(2) In the opposite figure :

ABCD is parallelogram

, then $m(\angle ADC) = \dots\dots\dots$

(35° **or** 45° **or** 100° **or** 135°)



(3) If the numbers 3 , 5 , x and 20 are proportional , then x =

(6 **or** 12 **or** 15 **or** 21)

(4) If one of angles of the parallelogram is right , then the resulting figure is

a

(rectangle **or** square **or** rhombus **or** cube)

(5) If an agriculture tractor ploughs 28 feddans in 4 hours , then the time

needed to plough 42 feddans is hours. (4 **or** 6 **or** 7 **or** 8)

(6) $\frac{5}{4} : 3 \frac{1}{4} = \dots\dots\dots$

(5 : 13 **or** 1 : 3 **or** 3 : 1 **or** 5 : 9)

(7) The sum of edge lengths of a cube is 24 cm. , then its volume = cm^3

(2 **or** 8 **or** 12 **or** 24)

(8) 25 % of 1 000 =

(2 000 **or** 1 500 **or** 250 **or** 500)

(9) The ratio between 250 grams and $\frac{1}{2}$ kg. =

(2 : 1 **or** 2 : 3 **or** 1 : 2 **or** 3 : 2)

(10) A machine produces 600 metres of clothes regularity in one hour and half ,
then the rate of production in metre per hour = metre/hour

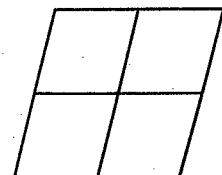
(500 **or** 400 **or** 300 **or** 200)

(11) In the opposite figure :

The number of parallelograms

which can be obtained is

(4 **or** 5 **or** 7 **or** 9)



(12) The following in this pattern $\triangle \bigcirc \bigcirc \square \triangle \bigcirc \bigcirc$ is

(\triangle **or** \bigcirc **or** \square **or** \diamond)

2 Complete :

- (1) $\frac{1}{4} = \dots\dots\dots \%$
- (2) If the dimensions of cuboid are equal in length , then it is called a
- (3) The range of the set of the values 7 , 3 , 15 and 8 is
- (4) The ratio between the side length of the square and its perimeter
= :
- (5) If $\frac{4}{6} = \frac{12}{x}$, then $x - 2 = \dots\dots\dots$
- (6) $1\,500\text{ dm}^3 = \dots\dots\dots$ litres
- (7) If the real length of an insect is 0.5 millimetres and its length in the picture is 4.5 cm. , then its drawing scale = :
- (8) If $A : B = 2 : 3$, $B : C = 3 : 5$, then $A : C = \dots\dots\dots :$

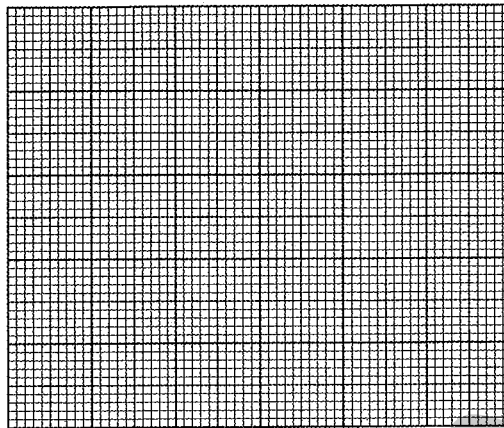
3 Answer the following :

- (1) Heba bought a vacuum cleaner for 220 pounds with a discount 20 %
Calculate the price before discount.
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.....
- (2) If the ratio between Hadir's weight and Basma's weight is 5 : 6 and the difference between their weights is 10 kg. Calculate the weight of each of them.
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- (3) In a metallic cube whose edge length is 12 cm. we want to melt and convert it to a number of cuboid alloys of dimensions 3 cm. , 4 cm. and 6 cm.
Calculate the number of alloys which can be obtained.
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- (4) A container has 12 litres of oil. We need to distribute it on small bottles with each one of the capacity 400 cm^3 Calculate the number of the needed bottles.
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.....

(5) The following table shows the marks of 100 pupils in mathematics :

Marks	10 –	20 –	30 –	40 – 50	Total
No. of pupils	15	40	30	15	100

Draw the frequency curve for this distribution.



8 El-Gharbia Governorate

El-Gharbia Educational Directorate
Maths Supervision



Answer the following questions :

1 Choose the correct answer :

- (1) If $\frac{4}{6} = \frac{12}{x}$, then $x + 2 = \dots\dots\dots$ (16 or 18 or 20 or 22)
- (2) The following data are descriptive data except $\dots\dots\dots$
(favorite color or age or birth place or blood species)
- (3) The volume of a cube is 27 cm^3 , then the perimeter of its base equals $\dots\dots\dots \text{ cm}$.
(36 or 24 or 27 or 12)
- (4) The ratio between the circumference of the circle and its diameter length
= $\dots\dots\dots : \dots\dots\dots$ ($\pi : 1$ or $2\pi : 1$ or $1 : 4$ or $\pi : d$)
- (5) If the volume of a cuboid = 300 cm^3 , its base area = 25 cm^2 , then its
height = $\dots\dots\dots \text{ cm}$. (12 or 13 or 14 or 15)
- (6) If the range is 40 and the length of the set is 5, then the number of sets
= $\dots\dots\dots$ (5 or 6 or 7 or 8)
- (7) If one angle of the parallelogram is right and its sides are equal in length, then
it is called $\dots\dots\dots$ (square or rhombus or triangle or rectangle)
- (8) $1 - (35 \% + 25 \%) = \dots\dots\dots$ ($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{2}{5}$ or $\frac{3}{4}$)

- (9) The diagonals are perpendicular and have the same length in the
(square **or** rectangle **or** trapezium **or** parallelogram)
- (10) $1.45 \text{ litres} + 0.5 \text{ dm}^3 = \dots\dots\dots$ litres. (1.5 **or** 1.95 **or** 1.55 **or** 6.5)
- (11) The percentage is a ratio , which its second term is
(10 **or** 100 **or** 1 000 **or** 10 000)
- (12) How many bottles of 750 mL. each can be filled with 30 litres of water ?
(4 **or** 40 **or** 400 **or** 4 000)
- (13) $\frac{1}{8}$ day : 6 hours : $\frac{1}{2}$ day = : :
(1 : 2 : 6 **or** 1 : 2 : 4 **or** 1 : 2 : 3 **or** 3 : 2 : 1)
- (14) 12 % of 500 kg. = kg. (40 **or** 50 **or** 60 **or** 70)

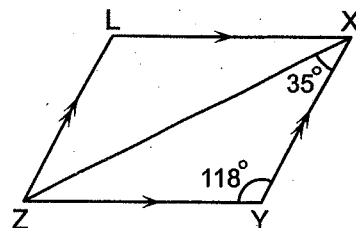
2 Complete the following :

- (15) If the ratio between measures of the angles of triangle is 5 : 6 : 7 , then the measure of the greatest angle = °
- (16) 16 kirats : 1 feddan = : (in the simplest form)
- (17) 2.65 litres = dm^3
- (18) $\frac{7}{20} = \dots\dots\dots$ %
- (19) If the ratio $a : b = 4 : 3$ and the ratio $b : c = 2 : 3$, then the ratio $a : b : c = \dots\dots\dots$
- (20) If the sum of lengths of all edges of a cube is 132 cm. , then its volume = cm^3
- (21) If the real length of an insect is 0.3 mm. and its length in a picture is 4.5 cm. , then the drawing scale = :
- (22) If Hassan spends L.E. 45 within three days , then the rate of what Hassan spends per day is

3 Answer the following :

(23) In the opposite figure :

XYZL is a parallelogram in which
 $m(\angle Y) = 118^\circ$, $m(\angle YXZ) = 35^\circ$
 Find : $m(\angle L)$, $m(\angle LXZ)$



- (24) A metallic cube of edge length 12 cm. , it needs to be converted into ingots in the shape of cuboid each of them of dimensions 3 cm. , 4 cm. and 6 cm. Calculate the number of ingots that are obtained.

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- (25) Three persons shared in business. The first paid 15 000 pounds , the second paid 25 000 pounds and the third paid 20 000 pounds. At the end of the year the net profit was 5 520 pounds. Calculate the share of each of them.

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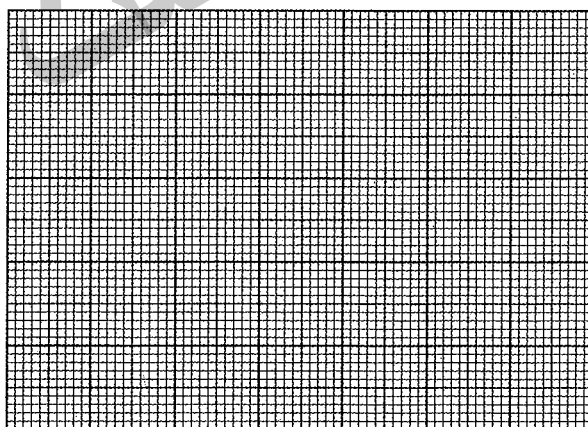
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- (26) The following table shows the marks of 100 students in one month in maths :

Marks	20 –	30 –	40 –	50 –	Total
Number of students	15	30	40	15	100

Draw the frequency curve for this distribution.



9 El-Dakahlia Governorate

Maths Supervision



Answer the following questions :


- 1 Choose the correct answer :

- (1) The ratio between the length of diameter of circle and its circumference is (1 : 1 or 1 : 4 or 1 : π or π : 1)
- (2) is a ratio between two different quantities.

(Ratio or Proportion or Rate or Drawing scale)

- (3) $\frac{x}{5} = 60\%$, then $x + 3 = \dots\dots\dots$ (3 or 6 or 600 or 30)
- (4) $\frac{1}{2} : \frac{3}{4} : \frac{2}{3} = \dots\dots\dots$ (6:8:9 or 8:9:6 or 9:6:8 or 6:9:8)
- (5) If the drawing scale > 1 , then this expresses $\dots\dots\dots$
(magnification or reduction or congruent or otherwise)
- (6) If the number of sets is 8 and length of set is 5 , then the range = $\dots\dots\dots$
(3 or 13 or 40 or 6)
- (7) 20 % of a number = $\dots\dots\dots$ % of half the same number.
(10 or 20 or 30 or 40)
- (8) Volume of a cube whose sum of edge lengths of two adjacent faces is 56 cm.
is $\dots\dots\dots \text{cm}^3$ (512 or 7 or 8 or 343)
- (9) Parallelogram with equal diagonals in length is called $\dots\dots\dots$
(trapezium or rectangle or rhombus or square)
- (10) If the radius length of a circle increases by the ratio 5 % , then the diameter
length increases by ratio $\dots\dots\dots$ (5 % or 10 % or 15 % or 5)
- (11) All of the following data are descriptive except $\dots\dots\dots$
(address or qualifications or age or birth place)
- (12) A car consumes 4 litres of fuel to cover distance 100 km. , then the rate of
consumption is $\dots\dots\dots$ litre per km. (25 or 0.4 or 0.04 or 400)

2 Complete :

- (1) In parallelogram ABCD , $m(\angle A) + m(\angle C) = 140^\circ$, then $m(\angle B) = \dots\dots\dots^\circ$
- (2) The volume of cuboid with dimensions 10 cm. , 8 cm. and 7 cm. = $\dots\dots\dots \text{cm}^3$
- (3) Age , birth date and weight are called $\dots\dots\dots$ data.
- (4) $1.5 \text{ litre} + 0.35 \text{ dm}^3 + 150 \text{ cm}^3 = \dots\dots\dots \text{cm}^3$
- (5) If $A = \frac{1}{2} B$, then $B : A = \dots\dots\dots \%$
- (6)  $\dots\dots\dots$ (in the same pattern)
- (7) If the length of an insect is 3 mm. , if its length in the picture is 6 cm. , then
the ratio of magnification is $\dots\dots\dots$
- (8) The area of a triangle = $\dots\dots\dots$

3 Answer the following :

- (1) If the number of pupils in a school is 630 pupils , if the ratio between the number of boys and the number of girls is 5 : 4 Find the number of each.

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- (2) A map is drawn with scale 1 : 400 000 , if the distance between two cities is 12 km. Find the distance between them on the map.

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- (3) A trader bought a TV set by L.E. 4 500 and sold it with profit 10 % Find the selling price.

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- (4) A box in a cuboid shape with square base its side length is 40 cm. and height 30 cm. is filled by bars of soaps in a cuboid shape with dimensions 6 cm. , 4 cm. and 5 cm. Find the greatest number of soaps can be put in the box.

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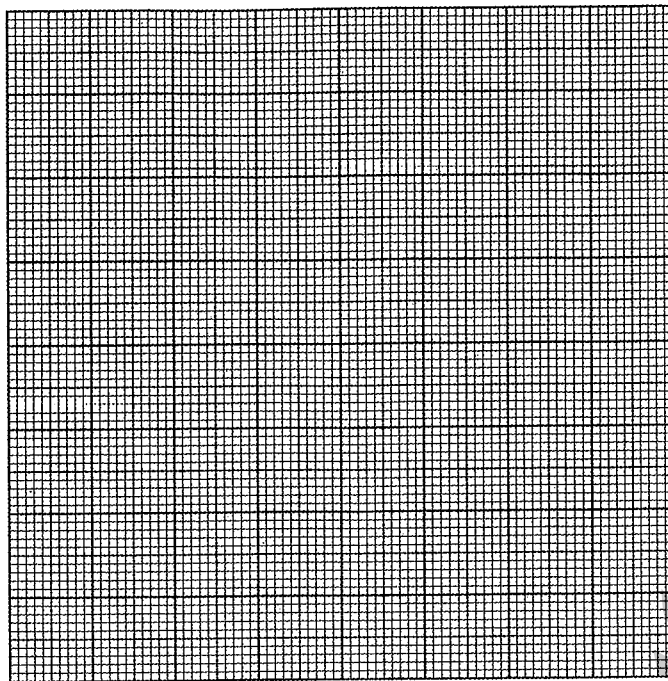
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- (5) The following table shows the number of hours which 50 pupils spend to study their lessons daily :

Number of hours	1 –	3 –	5 –	7 –	9 – 11	Total
Number of pupils	6	10	14	12	8	50

Represent these data by using a frequency curve.



10 Ismailia Governorate

South Ismailia Educational Zone
Suez Canal Language School



Answer the following questions :

1 Choose the correct answer :

(1) If $A : B = 2 : 3$, $B : C = 3 : 5$, then $A : C = \dots\dots\dots$

(2 : 5 **or** 3 : 6 **or** 2 : 3 **or** 5 : 2)

(2) If $\frac{2}{5} = \frac{x}{15}$, then $x = \dots\dots\dots$

(2 **or** 5 **or** 6 **or** 15)

(3) The following data are descriptive data except

(favorite colour **or** age **or** birth place **or** blood species)

(4) If the number 2 , 7 , x and 21 are proportional , then $x = \dots\dots\dots$

(6 **or** 21 **or** 12 **or** 7)

(5) If the real length of a tree is 6 m. and its drawing , length is 3 cm. , then the drawing scale = :

(1 : 100 **or** 1 : 200 **or** 1 : 300 **or** 1 : 600)

(6) $0.3 \text{ m}^3 = \dots\dots\dots \text{ dm}^3$

(3 000 **or** 300 **or** 30 **or** 3)

(7) If the volume of a cuboid equals 315 cm^3 , its base with length 9 cm. and width 7 cm. , then its height = cm.

(7 **or** 5 **or** 63 **or** 45)

(8) The two diagonals are equal in length and perpendicular in

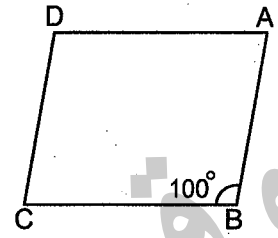
(rectangle **or** rhombus **or** triangle **or** square)

(9) $\frac{4}{5} = \dots\dots\dots \%$ (50 or 60 or 70 or 80)

(10) If Hany drinks 21 glasses of milk weekly , then he drinks $\dots\dots\dots$ glasses of milk every 3 days. (3 or 6 or 9 or 12)

(11) $\frac{1}{2}$ kg. : 700 gm. = $\dots\dots\dots$ (2 : 7 or $\frac{7}{8}$ or $\frac{5}{7}$ or $\frac{7}{9}$)

(12) In the opposite figure :
ABCD is a parallelogram , then :
 $m(\angle D) = \dots\dots\dots^\circ$



(100 or 60 or 80 or 70)

2 Complete :

(1) The range of the set of values 7 , 3 , 6 , 9 and 5 is $\dots\dots\dots$

(2) If the drawing scale < 1 , then this expresses $\dots\dots\dots$

(3) A cuboid of dimensions 5 cm. , 6 cm. and 2 cm. , its volume is $\dots\dots\dots \text{cm}^3$

(4) $1.5 \text{ litres} + 0.5 \text{ dm}^3 + 500 \text{ cm}^3 = \dots\dots\dots \text{litres}$.

(5) $1 - (15\% + 45\%) = \dots\dots\dots \%$

(6) $\frac{1}{4} : \frac{1}{3} : \frac{1}{2} = \dots\dots\dots : \dots\dots\dots$ (in the simplest form)

(7) The number of pupils in a primary school is 360 pupils , if the ratio between the number of boys and the number of girls is 1 : 2 , then the number of boys = $\dots\dots\dots$

(8) If the edge length of a cube = 4 cm. , then the volume = $\dots\dots\dots \text{cm}^3$

3 Answer the following :

(1) If the buying price of electric sets is L.E. 72 000 and sold at 12 % profit.
Calculate the selling price.

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- (2) Three persons started a business , the first paid 15 000 pounds , the second paid 25 000 pounds and the third paid 20 000 pounds , at the end of the year the profit was 5 520 pounds. Calculate the share of each of them.

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- (3) 10 litres of water were poured in a vessel in the shape of a cuboid its base is a square base of side length 25 cm. Find height of the water in the vessel.

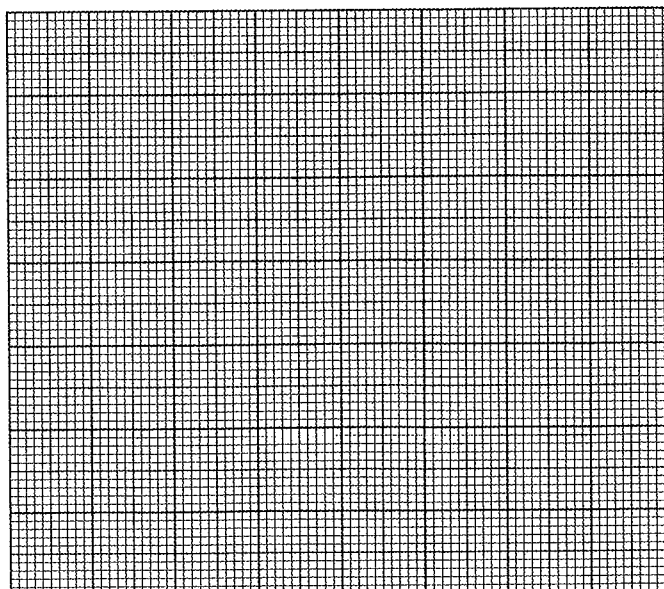
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- (4) The following table shows of money in pounds paid by a group of contributors in a charity :

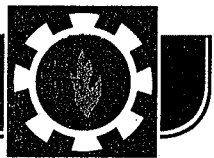
The sum	50 –	60 –	70 –	80 –	90 –	100 –
Number of contributors	5	7	10	12	10	7

Draw the frequency curve of this distribution.



11 Suez Governorate

South Educational Directorate
Maths Inspection



Answer the following questions :

1 Choose the correct answer :

(1) $\frac{2}{5} : \frac{7}{2} = \dots\dots\dots : \dots\dots\dots$ (5 : 7 or 4 : 35 or 2 : 7 or 5 : 2)

(2) In the parallelogram , the sum of the measures of any two consecutive angles = $\dots\dots\dots^\circ$ (45 or 90 or 180 or 360)

(3) The percentage is a ratio its second term is $\dots\dots\dots$ (10 or 100 or 200 or 1 000)

(4) 39 days $\approx \dots\dots\dots$ weeks. (4 or 5 or 6 or 7)

(5) The ratio between the length of the side of the equilateral triangle and its perimeter = $\dots\dots\dots : \dots\dots\dots$ (1 : 3 or 3 : 1 or 4 : 1 or 1 : 4)

(6) Cuboid of dimensions (5 cm. , 2 cm. , 7 cm.) , its volume = $\dots\dots\dots \text{cm}^3$ (24 or 48 or 65 or 70)

(7) The following data are descriptive data except $\dots\dots\dots$
(favorite colour or birth place or age or blood species)

(8) If $\frac{x}{5} = 40\%$, then $x = \dots\dots\dots$ (2 or 4 or 5 or 8)

(9) $3 \text{ m}^3 = \dots\dots\dots$ litres. (300 or 3 000 or 300 000 or 3 000 000)

(10) $\frac{3}{4} = \dots\dots\dots\%$ (25 or 50 or 57 or 75)

(11) An iron with price L.E. 120 at 20 % discount , the price after discount = L.E. $\dots\dots\dots$ (90 or 96 or 100 or 140)

(12) If the length of an insect in the picture is 4 cm. and its real length is 2 mm. , the drawing scale is $\dots\dots\dots : \dots\dots\dots$
(2 : 1 or 1 : 2 or 20 : 1 or 1 : 20)

2 Complete the following :

(1) Half km. : 250 metres = $\dots\dots\dots : \dots\dots\dots$ (in the simplest form)

(2) The range of the set of values 7 , 3 , 6 , 9 and 5 is $\dots\dots\dots$

(3) If $A : B = 3 : 4$, $B : C = 4 : 5$, then $A : C = \dots\dots\dots : \dots\dots\dots$

(4) The drawing scale = $\frac{\dots\dots\dots}{\text{The real length}}$

- (5) The two diagonals are equal in length in each of ,
- (6) 6 , 8 , 3 , (Complete the missing number to be proportional)
- (7) $\frac{1}{2} : \frac{1}{3} = \dots : \dots$ (in the simplest form)
- (8) Cuboid of volume is $1\,400\text{ cm}^3$, its height is 14 cm. , the area of its base = cm^2

3 Answer the following questions :

- (1) Hassan spends L.E. 45 within 3 days , what is the rate of what Hassan spends per day ?
.....
- (2) A vessel in the shape of a cube with edge length 30 cm. is filled with honey. Calculate the capacity of the vessel.
.....
.....
- (3) In one of our schools , there are 560 students , if the number of girls is $\frac{3}{5}$ the number of boys. Find each of the number of boys and girls.
.....
.....
.....

(4) In the opposite figure :

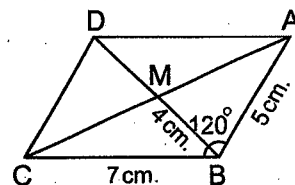
ABCD is a parallelogram in which

$AB = 5\text{ cm.}$, $BC = 7\text{ cm.}$

$BM = 4\text{ cm.}$, $m(\angle ABC) = 120^\circ$

Without using geometrical instruments

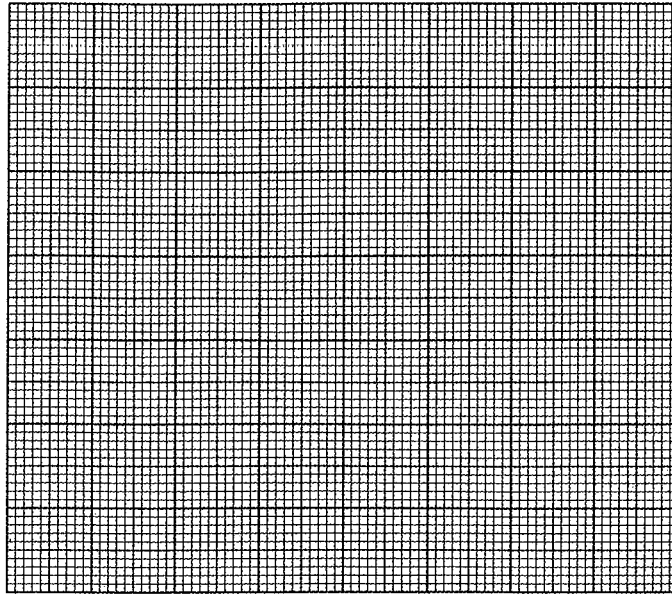
, find $m(\angle ADC)$ and the perimeter of $\triangle BCD$
.....
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- (5) The following table shows the number of hours which the pupils of a class spend daily in front of the computer :

Number of hours	- 1	- 2	- 3	- 4	- 5	- 6	Total
Number of pupils	8	10	12	6	4	2	42

Represent these data by a frequency curve.



12 Port Said Governorate

Maths Inspector



Answer the following questions :

1 Choose the correct answer :

(1) $\frac{2}{3} : 3 \frac{1}{3} = \dots\dots\dots$ (1 : 2 or 1 : 3 or 2 : 3 or 1 : 5)

(2) The centimetre cube is a unit of measuring the
(length or area or volume or weight)

(3) 18 kirats : 2 feddans = (1 : 2 or 3 : 8 or 1 : 24 or 18 : 2)

(4) If Heba bought a mobile phone for 900 pounds with a discount 10 % , then
the price of the mobile phone before the discount is pounds.
(9 000 or 1 000 or 990 or 100)

(5) If the drawing scale < 1 , this expresses
(equality or maximization or enlargement or minimization)

(6) A wooden box in the form of a cube , its external volume is $1\,000\text{ cm}^3$ and
its capacity is 729 cm^3 , then the volume of wood of the box = cm^3
(0.729 or 1 729 or 271 or 729 000)

(7) The diagonals are perpendicular in
(rectangle or trapezoid or rhombus or parallelogram)

(8) The ratio between the side length of the square to its perimeter is
(1 : 2 or 1 : 3 or 4 : 1 or 1 : 4)

- (9) If the ratio among the measurements of the angles of a triangle is 1 : 2 : 3 , then the measurement of the smallest angle is °
(10 or 20 or 30 or 60)
- (10) $1 \frac{3}{4} = \dots\dots\dots \%$ (25 or 50 or 75 or 175)
- (11) If one angle of parallelogram is right , then it is called
(rectangle or trapezoid or rhombus or rhombus)
- (12) The following data are descriptive data except
(age or birth place or blood species or favourite colour)

2 Complete the following :

- (1) The range of the set of values 8 , 1 , 9 , 11 and 7 is
- (2) The agricultural tractor ploughs 28 feddans in 4 hours , then the time which needed to plough 42 feddans is hours.
- (3) If the height of the fence of the villa in the design is 5 cm. and its real height is 5 metres , then the drawing scale is :
- (4) 5 000 grams : 8 kilograms = : (in the simplest form).
- (5) If $A : B = 1 : 2$, $B : C = 2 : 5$, then $A : C = \dots\dots\dots : \dots\dots\dots$
- (6) A cube of edge length 5 cm. , then its volume = cm^3
- (7) If $\frac{2}{5} = \frac{x}{20}$, then $x = \dots\dots\dots$
- (8) If the volume of a cuboid is 64 cm^3 and the area of its base is 16 cm^2 , then its height = cm.

3 Answer the following :

- (1) In the opposite figure :

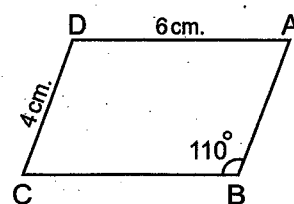
ABCD is a parallelogram , find :

[a] $m(\angle D)$

[b] $m(\angle A)$

[c] The length of \overline{AB}

[d] The perimeter of the shape ABCD



(2) If the buying price of electric sets is L.E. 72 000 and sold at 15 % profit.

Calculate the selling price.

.....

.....

(3) A cuboid tin with inner dimensions 2 dm. , 3 dm. and 4 dm. was full of honey.

Calculate the price of honey , given that the price of one litre is L.E. 20

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(4) In one of our schools , there are 1 000 students , if the ratio between the number of boys and the number of girls is 2 : 3 , find each of the number of boys and girls.

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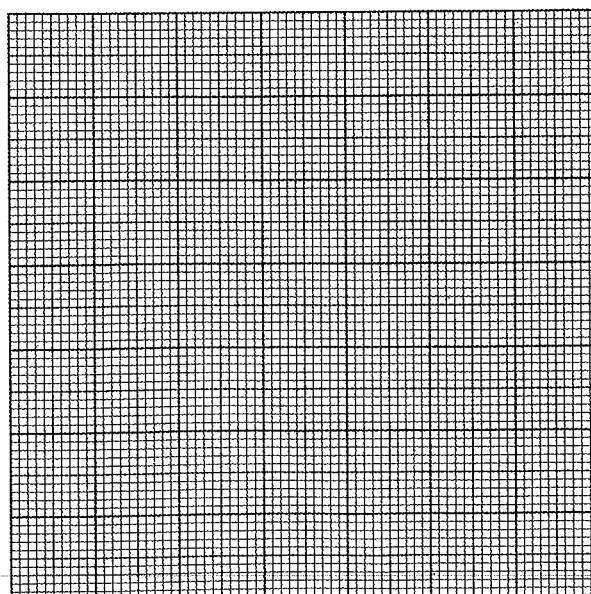
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(5) The following table shows the marks of 50 students in one month in maths :

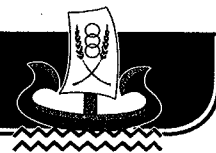
Marks	10 –	20 –	30 –	40 – 50	Total
Number of students	6	10	20	14	50

Represent these data by the frequency curve.



13 Kafr El-Sheikh Governorate

Maths Inspection



Answer the following questions :

1 Choose the correct answer between brackets :

- (1) If the values in the frequency distribution lies between (40 , 90) , then the range of this distribution = (130 or 50 or 80 or 180)
- (2) If 5 , 6 , x and 12 are proportional numbers , then x = (8 or 12 or 5 or 10)
- (3) An agricultural machine ploughs 17 feddans in 8.5 hours , then the rate of performance of the machine = feddans/hour (2 or 4 or 2.5 or 4.5)
- (4) If $a : b = 50 \%$ and $b : c = 2 : 3$, then $a : c =$ (1 : 2 or 2 : 3 or 2 : 6 or 3 : 1)
- (5) If the volume of a cuboid equals 360 cm^3 , its length is 9 cm. and its width is 8 cm. , then its height = cm. (5 or 40 or 48 or 72)
- (6) If one angle of the parallelogram is right angle , and has two adjacent sides are equal in length , then it is called (trapezium or square or rectangle or rhombus)
- (7) The ratio between the side length of the square and its perimeter = (4 : 1 or 1 : 4 or 1 : 3 or 1 : 6)
- (8) If the drawing scale < 1 , then it expresses (enlargement or congruency or reduction or equivalent)
- (9) $4.250 \text{ cm}^3 =$ mm^3 (4 250 or 42.5 or 0.425 or 4.25)
- (10) $3 \frac{4}{7} : 3 \frac{1}{8} =$ (7 : 8 or 8 : 7 or 1 : 4 or 1 : 1)
- (11) If the price of some goods is L.E. 256 and if the price became L.E. 192 during the discount , then the percentage of the discount equals (16 % or 75 % or 33 % or 25 %)
- (12) ABCD is a parallelogram , then $m(\angle A) + m(\angle B) =$ ° (90 or 108 or 180 or 360)

2 Complete each of the following :

(13) Emad sold a flat with profit 5 % , if his profit was L.E. 7 500 , then the selling price of the flat is L.E.

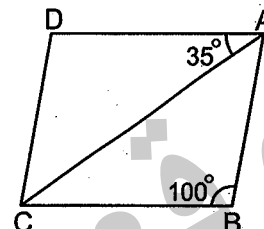
(14) $32 \% + 27 \% + \dots \% = 1$

(15) $\frac{1}{2} : \frac{1}{3} : \frac{1}{4} = \dots : \dots : \dots$ (in the simplest form)

(16) In the opposite figure :

ABCD is a parallelogram , then

$m(\angle ACD) = \dots^\circ$



(17) If the drawing scale is 1 : 500 000 and a road of real length 12.5 km. , then the length of the road on the map is cm.

(18) The volume of a cuboid is 64 cm^3 and the area of its base is 16 cm^2 , then its height = cm.

(19) The following figure in the pattern  is

(20) The following table shows the marks of 40 students in a test , then the number of students who got less than 30 marks =

Marks	10 –	20 –	30 – 40
Number of students	10	13	17

3 Answer the following :

(21) A cube of cheese with edge length 15 cm. , it is wanted to divide it into small cuboids each of dimensions 3 cm. , 5 cm. and 1 cm. Find the number of resulting small cuboids of cheese.

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(22) The ratio between the measures of two consecutive angles in a parallelogram is 4 : 5 Find the measure of each of them.

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- (23) Three persons shared in a business , the first paid L.E. 60 000 , the second paid L.E. 80 000 and the third paid L.E. 90 000 At the end of the year the profit was L.E. 20 700 Find the share of each one.

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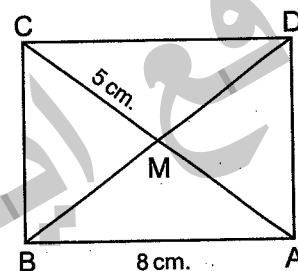
- (24) In the opposite figure :

ABCD is a rectangle in which $AB = 8$ cm.

and $MC = 5$ cm. Find :

[a] Length of \overline{AM} [b] Length of \overline{DB}

[c] Perimeter of $\triangle AMB$



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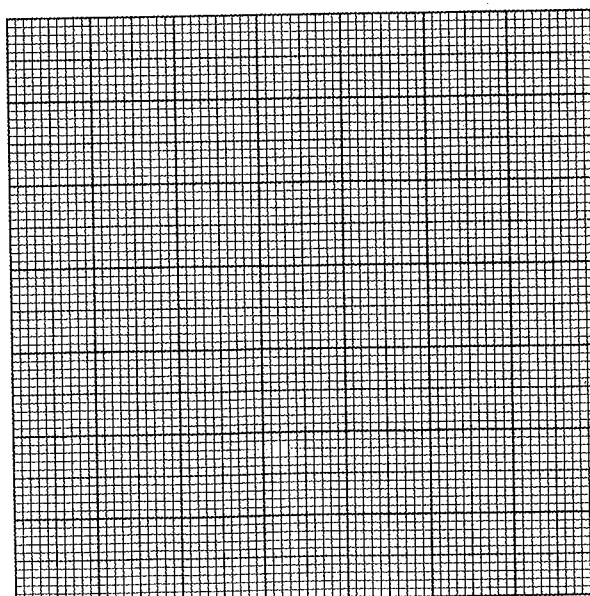
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- (25) The following table shows the marks of 30 pupils in mathematics :

Marks	10 –	20 –	30 –	40 –	Total
Number of students	5	7	10	8	30

Draw the frequency curve for this distribution.



14 El-Beheira Governorate

Rashid Educational Zone
Rashid Language School

Answer the following questions :

1 Choose the correct answer :

(1) $1 \frac{3}{4} = \dots\dots\dots \%$ (25 or 50 or 75 or 175)

(2) If 6 , 8 , 3 and x are proportional numbers , then $x = \dots\dots\dots$

(2 or 4 or 18 or 24)

(3) $6\,500\text{ dm}^3 = \dots\dots\dots \text{m}^3$ (6.5 or 65 or 605 or 650)

(4) $\frac{1}{2} : \frac{1}{3} = \dots\dots\dots : \dots\dots\dots$ (1:1 or 2:3 or 3:2 or 3:1)

(5) The ratio between the side length of the square and its perimeter

 $= \dots\dots\dots : \dots\dots\dots$ (1:1 or 1:3 or 1:4 or 4:1)

(6) The diagonals are perpendicular and equal in length in

(parallelogram or rectangle or rhombus or square)

(7) If the height of the fence of the villa in the design is 5 cm. and its real height is 5 metres , then the drawing scale is

(1:1 or 1:10 or 1:100 or 1:1 000)

(8) The percentage is a ratio which its second term is

(10 or 100 or 1 000 or 0.01)

(9) The volume of a cube of edge length 3 cm. = cm^3

(8 or 27 or 64 or 125)

(10) If $a : b = 2 : 3$ and $b : c = 3 : 5$, then $a : c = \dots\dots\dots$

(2:5 or 3:5 or 5:2 or 5:3)


(11) If the ratio between the weight of Hani and the weight of Ahmed is 5 : 6 and the weight of Ahmed is 60 kg. , then the weight of Hani = kg.

(40 or 50 or 60 or 10)

(12) The opposite data are quantitative data except

(weight or age or temperature degrees or blood species)

2 Complete the following :

- (13) The proportion is
- (14) 3 000 gm. : 5 kg. = : (in the simplest form)
- (15) If the drawing scale < 1 , then this expresses
- (16) The following figure in this pattern  is
- (17) The volume of a cuboid with a squared base of side length 6 cm. and its height is 10 cm. = cm^3
- (18) If the percentage of the number of girls in a class which mixed is 67 % , then the percentage of the number of boys in this class =
- (19) A computer colour printer prints 12 papers each 4 minutes , then the rate of work of this printer = papers/minutes
- (20) The range of the set of values 7 , 3 , 6 , 9 and 5 is

3 Answer the following :

- (21) A primary school has 540 pupils. If the ratio between the number of boys to the number of girls is 4 : 5 , calculate the number of each boys and girls.

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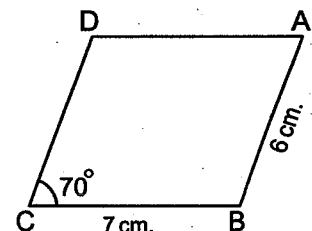
(22) In the opposite figure :

ABCD is a parallelogram in which $AB = 6 \text{ cm.}$
 $, BC = 7 \text{ cm. and } m(\angle C) = 70^\circ$

Find :

[a] $m(\angle D) = \dots\dots\dots$

[b] $AD = \dots\dots\dots \text{ cm.}$



- (23) A company for selling the electric sets. It shows TV set for L.E. 2 100 , if the percentage of the profit is 12 % Find the buying price of TV set.

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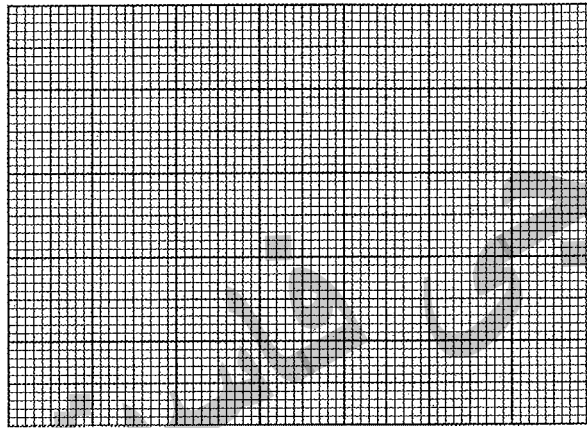
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- (24) A container has 12 litres of honey. It is wanted to put them in smaller bottles , the capacity of each of them is 400 cm^3 . Calculate the number of bottles which is needed for that.
-
-

- (25) The following table shows the marks of students in one month in math :

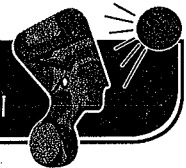
Marks	10 –	20 –	30 –	40 – 50	Total
Numbers of students	5	15	20	10	50

Represent these data using the frequency curve.



15 El-Menia Governorate

El-Menia Educational Zone
Kafr El-Mansorah Formal Languages Primary School



Answer the following questions :

- 1 Choose the correct answer :

(1) If $3a = 4b$, then , $\frac{a}{b} = \dots\dots\dots$

($\frac{3}{4}$ or $\frac{2}{3}$ or $\frac{4}{3}$ or $\frac{3}{2}$)

(2) If $\frac{4}{6} = \frac{12}{x}$, then $x + 2 = \dots\dots\dots$

(16 or 18 or 20 or 22)

(3) 300 grams : $1\frac{1}{2}$ kilogram = $\dots\dots\dots$:

(1 : 3 or 1 : 5 or 10 : 1 or 10 : 30)

(4) $1 - (35 \% + 25 \%) = \dots\dots\dots$

($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{2}{5}$ or $\frac{3}{4}$)

(5) The ratio between the circumference of the circle and its diameter length is $\dots\dots\dots$

($\frac{\pi}{2}$ or π or $\frac{1}{\pi}$ or 2π)

(6) $300 \text{ cm}^3 + 3.7 \text{ litres} = \dots\dots\dots \text{ litres}$

(6.7 or 4 or 3.6 or 303.7)

(7) An agricultural machine ploughs 6 feddans in 3 hours , then the rate of performance of the machine is $\dots\dots\dots$ feddans/hour

(2 or 15 or 3 or 25)

- (8) $\frac{1}{6} : 3 \frac{1}{3}$ in the simplest form is
 (1 : 20 or 2 : 15 or 2 : 5 or 1 : 5)
- (9) If the volume of a cuboid = 40 cm^3 , and its height = 4 cm. , then the area of its base = (10 cm. or 10 cm^2 or 160 cm^2 or 160 cm.)
- (10) The sum of measure of two consecutive angles in a parallelogram =
 (60° or 90° or 180° or 360°)
- (11) The two diagonals are equal in length and not perpendicular in
 (rectangle or rhombus or triangle or square)
- (12) The following data are descriptive except
 (favourite colour or age or birth place or name)

2 Complete the following statements :

- (1) If the real length of an insect is 0.3 mm. and its length in a picture is 4.5 cm. , then the drawing scale = :
- (2) $\frac{3}{10} = \dots\dots\dots \%$
- (3) The ratio between 3 feddans : 40 kirats = :
- (4) If $A : B = 2 : 3$, $B : C = 3 : 5$, then $A : C = \dots\dots\dots$:
 (in the simplest form)
- (5) 39 days \approx week. (to the nearest week)
- (6) The sum of all edges of a cube is 24 cm. , then its volume = cm^3
- (7) $\triangle \bigcirc \triangle \triangle \bigcirc \bigcirc \triangle \triangle \triangle$ (in the same pattern)
- (8) The range of the set of values 7 , 3 , 6 , 9 and 5 is

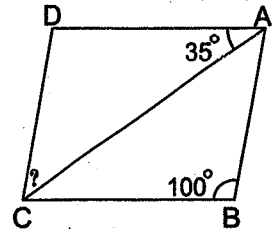
3 Answer the following questions :

- (1) If the buying price of electric sets is L.E. 72 000 and sold at 12 % profit
 Calculate the selling price.

- (2) If the ratio among the measures of the angles of a triangle is 2 : 3 : 4
 Find the measure of the greatest angle in this triangle.

(3) In the opposite figure :

ABCD is a parallelogram in which
 $m(\angle B) = 100^\circ$, $m(\angle DAC) = 35^\circ$
 Find : $m(\angle ACD)$

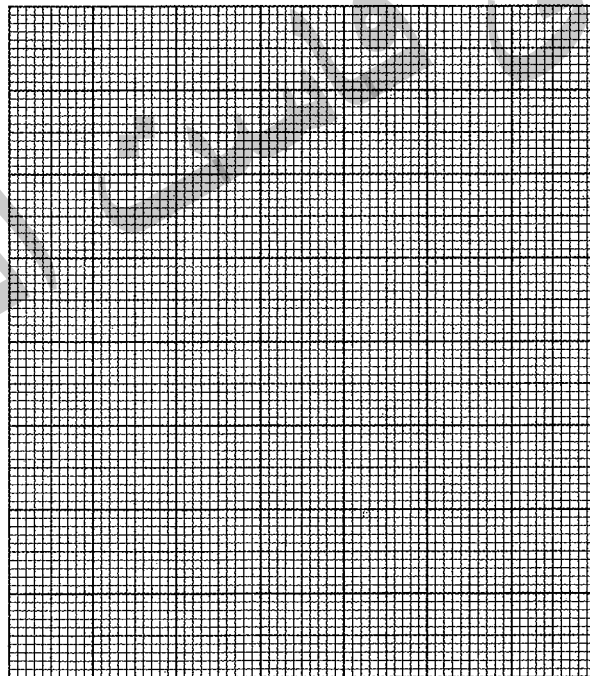


(4) A cuboid tin with inner dimensions 2 dm. , 3 dm. and 4 dm. was full of honey.
 Calculate the price of honey , given that the price of one litre is L.E. 20

(5) The following table shows the marks of 100 students in one month in math test :

Marks	10 –	20 –	30 –	40 – 50	Total
Number of students	15	30	40	15	100

Draw the frequency curve of this distribution.



16 Souhag Governorate

Maths Supervision



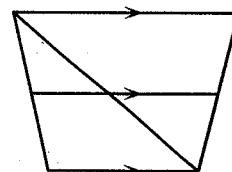
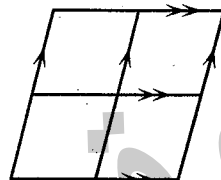
Answer the following questions :

1 Choose the correct answer :

(1) If $a : b = 2 : 3$, $b : c = 6 : 7$, then $a : c = \dots\dots\dots$

(7 : 4 or 4 : 7 or 12 : 7 or 6 : 7)

- (2) The range of the values 7 , 3 , 6 , 15 and 10 is
 (4 or 7 or 12 or 15)
- (3) If $\frac{x}{9} = \frac{4}{3}$, then $x + 2 =$
 (12 or 14 or 16 or 20)
- (4) $1 - (35 \% + 25 \%) =$
 ($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{2}{5}$ or $\frac{3}{4}$)
- (5) The ratio between 3 feddans : 24 kirats =
 (3 : 2 or 3 : 1 or 1 : 8 or 1 : 4)
- (6) The number of parallelograms
 in the opposite figure is
 (9 or 7 or 5 or 4)
- (7) If the volume of a cuboid = 300 cm^3 , its base area = 25 cm^2 , then its height
 = cm.
 (12 or 13 or 14 or 15)
- (8) $250 \text{ gm.} : \frac{1}{2} \text{ kg.} =$
 (2 : 1 or 1 : 2 or 1 : 5 or 5 : 1)
- (9) A cube of volume 125 cm^3 , then the area of its base =
 (25 cm^2 or 25 cm. or 5 cm^2 or 5 cm.)
- (10) The following data are descriptive except the
 (favourite colour or birth place or age or blood species)
- (11) In the opposite figure :
 The number of trapezoids is
 (2 or 4 or 3 or 5)
- (12) $23 \text{ cm}^3 =$ litres.
 (0.23 or 2 300 or 0.023 or 230)



2 Complete each of the following :

- (1) $\frac{1}{4} : \frac{1}{3} : \frac{1}{2} =$: : (in the simplest form)
- (2) If the drawing scale > 1 , then this expresses
- (3) $\triangle \bigcirc \triangle \triangle \bigcirc \bigcirc \triangle \triangle \triangle$ (in the same pattern)
- (4) The difference between the maximum value and the minimum value is called
- (5) The number of edges of a cube = edges.
- (6) Area of the square = side length \times
- (7) $300 \text{ mm}^3 =$ cm^3
- (8) From the properties of the proportion , the product of the extremes
 = the product of the

3 Answer the following questions :

- (1) A metallic cube of edge length 12 cm. , it needs to be converted it into ingots in the shape of cuboid each of them of dimensiona 3 cm. , 4 cm. and 6 cm. Calculate the number of ingots that are obtained.

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- (2) The ratio among the lengths of the sides of a triangle is 2 : 3 : 4 and the preimeter of the triangle = 36 cm. Calculate the length of each side of the triangle.

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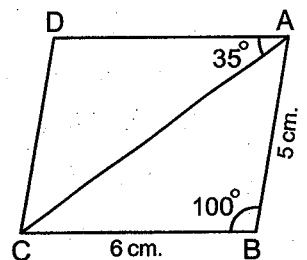
- (3) In the opposite figure :

ABCD is a parallelogram in which
 $AB = 5 \text{ cm.}$, $BC = 6 \text{ cm.}$ $m(\angle B) = 100^\circ$
 and $m(\angle DAC) = 35^\circ$, without using measuring tools , find :

[a] $m(\angle D) = \dots\dots\dots^\circ$

[b] $m(\angle ACD) = \dots\dots\dots^\circ$

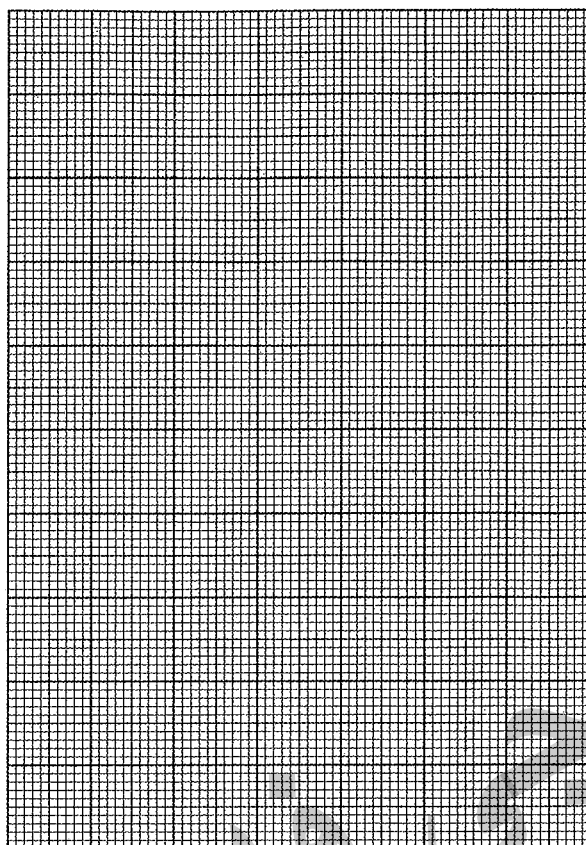
[c] The perimeter of the parallelogram ABCD = $\dots\dots\dots \text{ cm.}$



- (4) The following table shows the ages of visitors to a museum during a certain period :

Visitor's age	10 –	20 –	30 –	40 –	50 –	Total
Frequency	7	10	15	20	13	65

Draw the frequency curve for this distribution.



17 Qena Governorate

Maths Supervision



Answer the following questions :

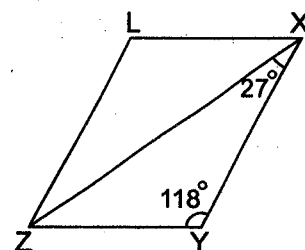
1 Complete each of the following :

- (1) 30 days \approx weeks. (to the nearest week)
- (2) $1 \frac{3}{4} =$ %
- (3) If the volume of a cuboid is 64 cm^3 and the area of its base is 16 cm^2 , then the height = cm.
- (4) If x , 18, 6 and 9 are proportional quantities, then $x =$
- (5) If $a : b = 2 : 3$ and $b : c = 3 : 5$, then $a : c =$
- (6) If the marks of 6 pupils in one test are 29, 33, 57, 40, 36, 49, then the range of these marks =
- (7) In the opposite figure :

XYZL is a parallelogram in which
 $m(\angle Y) = 118^\circ$ and $m(\angle YXZ) = 27^\circ$, then :

[a] $m(\angle L) =$ $^\circ$

[b] $m(\angle LXZ) =$ $^\circ$



- (8) The area of the triangle = $\frac{1}{2} \times$ \times

2 Choose the correct answer from those given :

- (9) The opposite data are descriptive except
 (The favorite colour **or** birthday **or** age **or** blood species)
- (10) 4.6 litres = mL. (46 **or** 460 **or** 4 600 **or** 46 000)
- (11) $\frac{2}{3} : 3 \frac{1}{3} = \dots : \dots$ (1 : 2 **or** 2 : 5 **or** 1 : 10 **or** 1 : 5)
- (12) The volume of the cuboid whose dimensions are 2 cm. , 3 cm. , 5 cm.
 = cm³ (10 **or** 25 **or** 30 **or** 50)
- (13) The centimetre cube is a unit for measuring
 (the perimeter **or** the area **or** the volume **or** the length)
- (14) If one of the angles of a parallelogram is right and two of its adjacent sides are equal in length , then it is called
 (rhombus **or** square **or** triangle **or** rectangle)
- (15) The drawing scale = $\frac{\dots}{\dots}$
 ($\frac{\text{length in reality}}{\text{length in drawing}}$ **or** $\frac{1}{\text{length in reality}}$ **or** $\frac{\text{length in drawing}}{\text{length in reality}}$ **or** $\frac{1}{2}$)
- (16) A tractor ploughs 28 feddans in 4 hours , then the time which is needed to plough 42 feddans = hours. (4 **or** 6 **or** 7 **or** 8)
- (17) $\frac{3}{4} = \dots$ (as a decimal fraction) (0.2 **or** 0.5 **or** 0.25 **or** 0.75)
- (18) 45 % = (as a fraction in the simplest form)
 ($\frac{45}{1\,000}$ **or** $\frac{9}{20}$ **or** $\frac{4}{10}$ **or** $\frac{5}{100}$)
- (19) The ratio between 12 kirats and 2 feddans = :
 (1 : 4 **or** 4 : 1 **or** 1 : 6 **or** 6 : 1)
- (20) If a man distributed L.E. 200 among his three sons in the ratio 2 : 3 : 5 , then the share of the third = L.E.
 (50 **or** 100 **or** 150 **or** 75)

3 Answer the following :

- (21) A cube of metal its edge length is 12 cm. If it is wanted to be melted down and converted into alloys in the form of a cuboid with dimensions 3 cm. , 4 cm. , and 6 cm. Calculate the number of alloys that can be obtained.

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(22) Ahmed draw a picture of his brother Osama with a drawing scale 1 : 40

If the real height of Osama is 160 cm. What is height in the picture ?

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(23) A triangular garden in a school , the ratio between its side lengths is 3 : 4 : 5

, if the perimeter of the garden is 120 metres , calculate the length of each of the sides of the garden.

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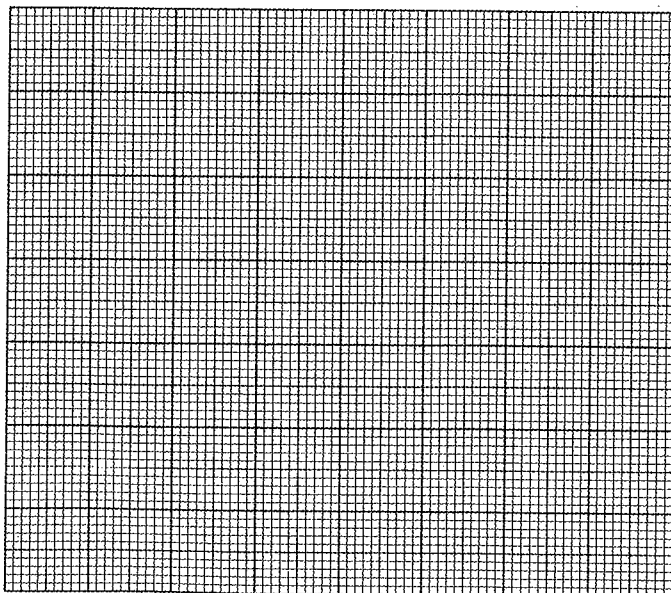
(24) The following table shows the extra money which 100 workers got in a month in a factory :

The extra money	20 –	30 –	40 –	50 –	60 –	70 –	Total
Number of workers	20	15	30	20	10	5	100

[a] Draw the frequency curve of this distribution.

[b] What is the number of workers who obtained extra money less than 50 pounds ?

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18 Luxor Governorate

Luxor Educational Directorate
Maths Department



Answer the following questions :

1 Choose the correct answer :

- (1) Parallelogram is a rectangle if one of its angles is
(right **or** acute **or** obtuse **or** straight)
- (2) The ratio between the side length of the square to its perimeter
is : (1:5 **or** 1:3 **or** 1:4 **or** 4:1)
- (3) A car covers 240 km. in 3 hours , then the car speed is km./hour
(60 **or** 80 **or** 120 **or** 90)
- (4) The simplest form of the ratio 2.4 : 18 = :
(2:15 **or** 1:6 **or** 6:7 **or** 5:3)
- (5) In the proportion 6 , 8 , 3 , x , the value of x is
(5 **or** 7 **or** 4 **or** 3)
- (6) All of the following are considered descriptive data except
(name **or** age **or** address **or** hobbies)
- (7) $16\,000\text{ cm}^3 = \dots\dots\dots$ litres. (1.6 **or** 16 **or** 160 **or** 0.16)
- (8) $\frac{2}{5} = \dots\dots\dots\%$ (20 **or** 40 **or** 60 **or** 10)
- (9) If $a : b = 2 : 3$ and $b : c = 5 : 6$, then $a : c = \dots\dots\dots$
(5:9 **or** 9:7 **or** 5:8 **or** 15:11)
- (10) The sum of all edge lengths of a cube is 84 cm.
, then its volume is cm^3 (49 **or** 343 **or** 28 **or** 14)
- (11) 15 % of 400 = (40 **or** 70 **or** 80 **or** 60)
- (12) 2 kg. : 3 500 gm. = : (2:3 **or** 7:6 **or** 4:7 **or** 5:4)

2 Complete the following :

- (1) The range of the set of values 7 , 3 , 8 , 9 and 5 is
- (2) Diagonals are equal in length in each of and
- (3) If the drawing length is 3 cm. and the real length is 18 m. , then the drawing
scale is :
- (4) The volume of a cuboid is 720 cm^3 , and its height is 9 cm. , then its base
area is cm^2
- (5) If the buying price of some goods is L.E. 2 000 and it sold for L.E. 1 800 ,
then the percentage of loss is %

(6) If $\frac{2}{5} = \frac{8}{x}$, then $x = \dots\dots\dots$

(7) $1 - 70\% = \dots\dots\dots\%$

(8) The simplest form of the ratio $12 : 18 : 36 = \dots\dots\dots : \dots\dots\dots : \dots\dots\dots$

3 Answer the following :

(1) The ratio between Mina's age and Ahmed's age is $7 : 11$, and the difference between their ages is 8 years, find the age of each of them.

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(2) A picture of a tree is drawn with a drawing scale $1 : 100$, if the real height of the tree is 8 m., find its length in the picture.

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(3) A swimming pool is in the shape of cuboid whose internal dimensions are 40 m., 30 m. and 1.8 m., find its capacity in litre.

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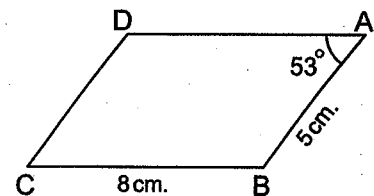
(4) In the opposite figure :

ABCD is a parallelogram in which $AB = 5$ cm.,

$BC = 8$ cm. and $(\angle A) = 53^\circ$ Find :

[a] $m(\angle B)$

[b] The length of \overline{AD} and the length of \overline{DC}

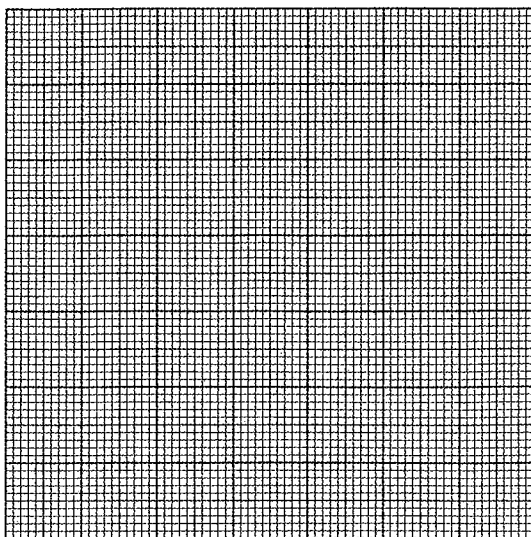


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(5) The following table shows the ages of visitors to an exhibition within an hour of a day :

Visitor's age	10 –	20 –	30 –	40 –	50 –	Total
Number of visitors	6	9	12	10	8	45

Draw the frequency curve for this distribution.



19 Aswan Governorate

Aswan Educational Directorate
Eng. M.M. Yacoub Formal Language School

Answer the following questions :

1 Choose the correct answer of the following :

- (1) The following data are quantitative except
(age **or** weight **or** name)
- (2) If the sum of the edge lengths of a cube is 36 cm. , then its volume
= cm³ (3 **or** 27 **or** 12)
- (3) If $a : b = 2 : 3$, $b : c = 6 : 7$, then $a : c =$
(7 : 4 **or** 12 : 7 **or** 4 : 7)
- (4) $12 \text{ dm}^3 =$ cm³ (1 200 **or** 12 000 **or** 120)
- (5) $\frac{2}{3} : 3 \frac{1}{3} =$: (1 : 5 **or** 2 : 3 **or** 2 : 5)
- (6) If one angle of a parallelogram is right , then it called a
(rectangle **or** square **or** rhombus)
- (7) $1 \frac{3}{4} =$ % (75 **or** 175 **or** 25)
- (8) An agricultural tractor ploughs 28 feddans in 4 hours , the time that needed
to plough 42 feddans is hours. (4 **or** 12 **or** 6)
- (9) If $\frac{x}{18} = \frac{4}{6}$, then $x + 1 =$ (13 **or** 11 **or** 12)
- (10) If length of an insect in a picture is 40 cm. , and the real length is 2 mm.
, then the drawing scale is (200 : 1 **or** 20 : 1 **or** 1 : 200)
- (11) If a car covered 280 km. in 4 hours , then the rate of covered distance per
hour = km./hr. (7 **or** 70 **or** 700)
- (12) Two wires , the ratio between their lengths is 3 : 4 and their sum is 140 cm.
, then the length of the second wire is cm. (30 **or** 40 **or** 80)

2 Complete each of the following :

(1) The following figure in this pattern    is

(2) Drawing scale = $\frac{\text{.....}}{\text{.....}}$

(3) If the volume of a cuboid is 560 cm^3 and its height is 8 cm. , then its base area is cm^2

(4) If the marks of 5 pupils in a test are 36 , 40 , 57 , 29 and 33 , then the range of marks is

(5) $1 - (25 \% + 30 \%) = \text{.....} \%$

(6) 80 minutes : 2 hours = : (in the simplest form)

(7) A map is drawn with a scale 1 : 200 000 , if the distance between two cities is 8 km. in reality , then the length between them on that map is

(8) The ratio between length of side of an equilateral triangle and its perimeter = :

3 Answer the following :

(1) Two persons started a commercial business , the first paid L.E. 5 000 and the second paid L.E. 8 000 , at the end of the year the profit was L.E. 3 900 Calculate the share of each of them from profit.

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(2) A container has 16 litres of oil , it is wanted to put them in small bottles , the capacity of each of them is 400 cm^3 . Calculate the number of bottles.

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(3) If buying price of electric sets is L.E. 72 000 and sold at 12 % profit. Calculate the selling price.

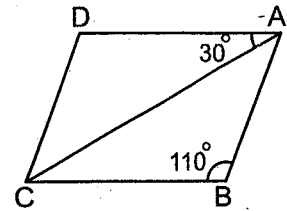
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(4) In the opposite figure :

ABCD is a parallelogram , then find :

[a] $m(\angle D) = \dots\dots\dots^\circ$

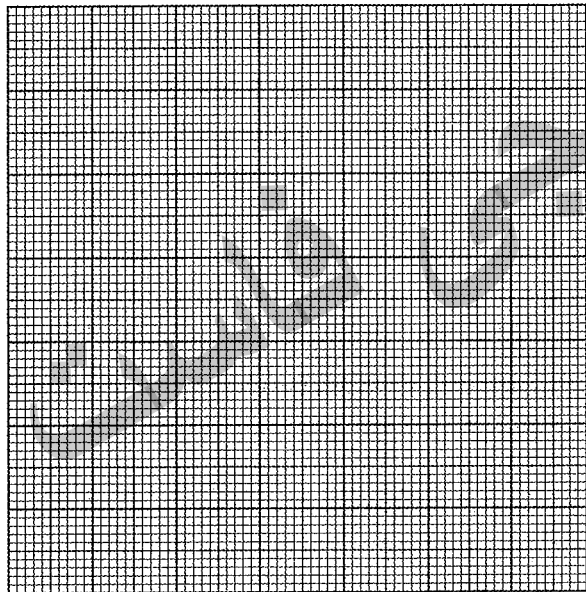
[b] $m(\angle ACD) = \dots\dots\dots^\circ$



(5) The following table shows the number of hours which spent by 40 pupils to study their lessons daily :

Number of hours	1 –	2 –	3 –	4 –	5 – 6	Total
Number of pupils	6	3	8	12	11	40

Represent these data using the frequency curve.



20 South Sinai Governorate

El-Tur Educational Zone
Maths Inspection



Answer the following questions :

1 Choose the correct answer :

(1) If 2 , 5 , x and 15 are proportional , then $x = \dots\dots\dots$

(2 or 5 or 6 or 15)

(2) The percentage is a ratio its second term is

(10 or 100 or 1 000 or 10 000)

(3) 3 litres = cm^3

(3 or 30 or 300 or 3 000)

(4) If the ratio between a child's age to his father's age is 2 : 13 and the child's age is 6 years , then father's age = years.

(6 or 15 or 39 or 41)

- (5) The ratio between the two numbers 1.6 and 1.8 = :
(1 : 4 or 8 : 9 or 3 : 8 or 1 : 16)
- (6) The number of edges of the cube the number of faces of the cuboid.
(> or < or = or ≤)
- (7) A merchant bought a TV set for L.E. 1 800 and he sold it for L.E. 2 000 , then his profit = L.E.
(1 800 or 800 or 200 or 3 800)
- (8) The range of the set of values 7 , 3 , 6 , 9 and 5 is
(4 or 2 or 6 or 12)
- (9) If the real length is 6 m. and the drawing length is 6 cm. , then the drawing scale = :
(1 : 10 or 1 : 100 or 1 : 1 000 or 1 : 6)
- (10) Antecedent of the ratio 3 : 11 is
(3 or 5 or 11 or 2)
- (11) An agricultural tractor ploughs 28 feddans in 4 hours , then its rate of performance = feddans / hour
(4 or 6 or 7 or 8)
- (12) If one of the angles of a parallelogram is right angle , then it is called
(a square or a rectangle or a rhombus or a triangle)

2 Complete :

- (1) $\frac{3}{4} = \dots\dots\dots \%$
- (2) The ratio between the side length of the square and its perimeter = :
- (3) If the volume of a cuboid is 64 cm^3 and the area of its base is 16 cm^2 , then its height = cm.
- (4) 250 grams : $\frac{1}{2}$ kilogram = : (in the simplest form)
- (5) If the drawing scale < 1 , this expresses
- (6) If $a : b = 2 : 3$, $b : c = 3 : 5$, then $a : c = \dots\dots\dots : \dots\dots\dots$
- (7) $4 \text{ m}^3 = \dots\dots\dots \text{ dm}^3$
- (8) The data : the age , the length , the weight and the favorite color are quantitative data except

3 Answer the following :

- (1) Nahed bought an automatic washing for L.E. 3 600 and the discount was 10 % Calculate the original price of the washing machine before discount.

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- (2) The ratio among the measures of the angles of a triangle is 2 : 3 : 4
Find the measure of each angle in the triangle.

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- (3) A vessel in the shape of a cube with edge length 15 cm. is filled with honey.
Calculate the capacity of the vessel of the honey.

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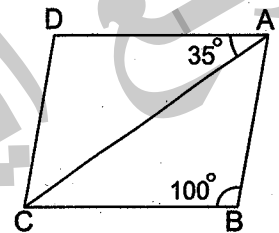
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- (4) In the opposite figure :

ABCD is a parallelogram , find :

[a] $m(\angle BAC) = \dots\dots\dots^\circ$

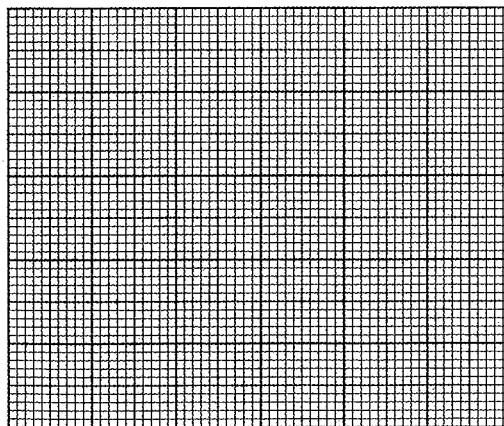
[b] $m(\angle D) = \dots\dots\dots^\circ$



- (5) The following table shows the marks of 100 students in one maths test :

Marks	10 –	20 –	30 –	40 –	Total
Number of students	15	30	40	15	100

Draw the frequency curve of this distribution.



موقع ايجي فامست التعليمي